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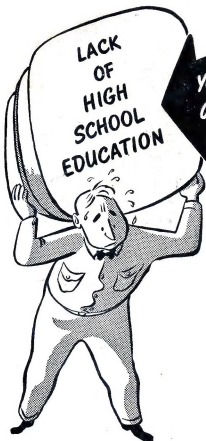
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UNIVERSES**
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**CALL
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THRILLING WONDER STORIES

Vol. XXIX, No. 1

A THRILLING PUBLICATION

Fall, 1946



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October, 1946, issue

Read Our Companion Science Fiction Magazine—**STARTLING STORIES**



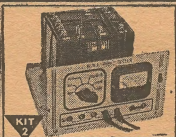
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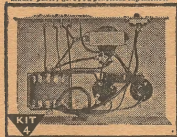
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WITH the increasing importance of science fiction and pseudo-science revealing itself more clearly every day, it has been increasingly brought home to the Sarge that by and large STF is no longer largely a game for the blooming of adolescent imaginations and humor.

God forbid that imagination or humor should ever desert youth—or mature humanity either. Without both, this world would long since have ceased progressing—if, in truth, it is progressing. Certainly the Sarge would be lost without them as would his ever-loving correspondents.

But after putting the old-style letter column to the test and receiving a vigorous request to change his manners or get out of print, from a vast majority of fans and readers, he has decided upon certain definite alterations in his epistolary personality.

From now on, the following will be outlawed in this column and its companion piece in **STARTLING STORIES**, "The Ether Vibrates":

- (1.) The Sarge is definitely on the wagon—at least as far as Xeno is concerned.
- (2.) Frogeyes, Wart-ears and Snaggleteeth are hereby relegated to the outer regions of space from which they stemmed.
- (3.) Space lingo as such is no longer for us.

We reserve the right to make an occasional bad pun if the situation seems to demand it, and to burst into verse under obvious conditions. But otherwise, we shall answer queries, letters and insults as forthrightly as possible. Since our readers show evidence of wanting to grow up, it is the least we can do.

But you readers must fulfill your part of this new deal. By way of a horrible example of what not to do any more, we are printing the following letter from one Guerry Brown, Box 1467, Delray Beach, Florida. If you want

to be printed, study this and do something—almost anything else. Up to now we'd have considered this letter okay—but the old order changeth!

Dear Sarge: I was walking along a dark, lonely road, the Spring, "46" issue of TWS (why I capitalize it, I don't know) under my bullet-proof vest, when a long, dark limousine drew up alongside me.

"There he is!" a hoarse voice shouted. "That's the guy who bought the last issue of Thrilling Wonder Stories at the news stand. Grab him!"

A horrible assortment of weird-looking robots clanked out and seized me. They tied me up, one of the robots sitting on my head while three others did the tying. Then they picked me up and tossed me in the car's luggage compartment. Heh, heh, little did they know that they were dealing with the great G. C. Brown himself!!!

By the time they reached their destination, I had worked loose my bonds, and as one of the robots opened the compartment I picked up a handy monkey wrench and bashed him in the head. His tubes and batteries were short-circuited, and he vanished in a flash of purple flame. I destroyed three more robots before they finally managed to tie me up again.

Then I was carried into a little weatherbeaten shack. The robots, directed by a little hunch-backed man, raised a trap door in the shack's dusty floor, revealing a long, rickety flight of stairs leading down into nowhere. After being carried through many winding passages, we finally came to a steel door. The hunch-backed man muttered some mysterious words, and the door opened.

There, on a pedestal built of empty Xeno kegs sat **SERGEANT SATURN**. Around him clustered his three hideous attendants. Fresh kegs of Xeno kept rolling in from the brewery. A long pipe ran to the top of the pedestal. Under this the Sergeant sat, drinking the Xeno as it was piped from the kegs. Around the sides of the room were printing presses, evidently for printing TWS and SS. Next to the presses was what looked like a circular saw. I wondered for a moment what it was, then the truth dawned upon me. It was the machine for cutting the edges of the stiff magazines. Two robots dragged me before the Sarge. He demanded that I give up my copy of TWS.

"Uh-unh," I said.

"Okay, boys, let him have it," the Sarge yelled. Several robots grabbed me and threw me on a table, and strapped me down.

"No, no!" I cried, but it did no good. They cut open my bullet-proof vest and yanked out the copy of TWS. A lean, ugly man with a close-cropped, bullet-shaped head and a long, wicked scar across his face came in, and one of the robots handed him the mag.

"Ah, at last I have my masterpiece back!" he cried. This, evidently, was the great Earle Bergy, himself. Snaggleteeth had dropped his last copy in the Xeno jug

(Continued on page 101)



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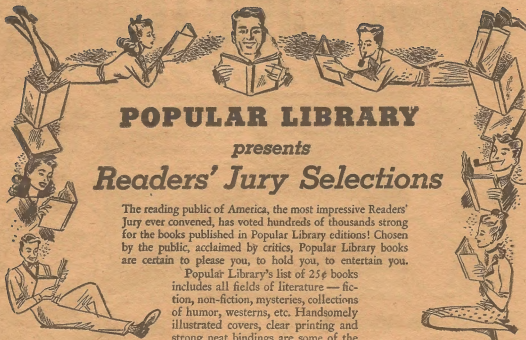
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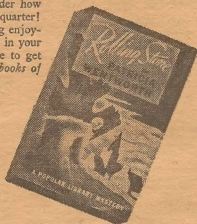
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Mayson raised the lovely girl in his arms

The Multillionth Chance

By JOHN RUSSELL FEARN

Physicist Grant Mayson re-creates Iana, the wonder girl of long ago, out of scattered atoms—but between them stands the memory of Anrax, long-dead master of science!

CHAPTER I

Mystery Girl

GRANT MAYSON had done the job so many times it had lost all its fascination. Long ago, when he had been a mere apprentice to this huge Transmutation

Laboratory, he had gaped in wonder at the crash and crackle of twenty million volts of man-made lightning flashing between anode and cathode spheres as base elements were changed into commercial products, or rare metals, according to the demands of the Government.

Now, after twelve years of continuous as-

AN AMAZING SCIENTIFICTION NOVEL

sociation with this particular scientific miracle, he was in charge of Laboratory A and not over-thrilled by it either.

Today, as usual, it was the same old routine. He sat with his long, lean body folded up on the tub seat before the control board, deep inside the massive textolite globe which formed the cathode of the twin globes. Through a minute observation slit he saw the opposing globe fifty feet distant, the backdrop of the laboratory equipment behind it.

"Lights out!" he barked into the telephone, and total darkness descended outside his globe.

There were no assistants inside the laboratory: they were in the power-control rooms two blocks away from this center of vast disturbances to come. Grant Mayson was on his own, lord of the lightning indeed, atom-smashing and metal-mutating brought to such a fine art in this year of 1964 that the efforts of Rutherford and Van de Graaf of earlier years seemed like the strugglings of amateurs by comparison.

Grant narrowed his keen blue eyes through the slit in the spherical wall, and took a last look round. He smoothed back the tumbled dark hair from his forehead, reached out his lean hand and closed the master switch.

Nothing to do now but wait for the dials to tell him when the job was done. Unperturbed, he watched lightning flicker and jump in rapid fire flashes. Green, blue, lavender, violet arrows were presently stabbing to the dark laboratory roof and then down the massive supporting columns to earth. . . .

The electrical fury grew apace, discharging its terrific main load into the giant vacuum tube a few yards away, at the base of which reposed the particular element to be converted. In ten minutes, Grant knew, that cube of crude metal would be gold, its atomic makeup shattered—moulded, and transformed into the precious metal.

Gradually the whole laboratory began to quiver in an eerie glow of streamers and fireballs as twenty million volts crashed between the globes. Four minutes—five—six—

TEN! The indicator needle quivered on the red line.

Grant shut off the power and the miniature thunderstorm came to a sudden end.

"Lights!" he snapped. He eased his lanky figure out of the chair, mopped his face, then opened the airlock of the dome.

The cold-light arcs were blazing down from the roof now, flooding the wilderness of apparatus. Grant climbed steadily down the metal ladder, smiling at a sensation which once had worried him, that feeling of cramp and of having the hair lifted straight up by the static electricity. The reek of ozone, the smell of hot oil—same old set up.

Humming a tune to himself he crossed the waste of concrete floor towards the vacuum-tube chamber, then half way to it he paused and blinked. His whistling stopped in mid bar and an expression of astounded wonder settled on his lean young face.

There was something in the center of the floor that had no conceivable right to be there. A girl! She lay flat on her back, arms flung back over her head, legs stretched out in front of her.

"What the devil!" Grant whispered, moving a step or two closer to look at her.

She was not like any girl one would see around in the ordinary way. For one thing her clothing was unusual. It consisted of a one piece garment with short sleeves, the material radiating light as though sewn with thousands of minute diamonds. Two dainty, sandaled feet were outthrust revealing a shapely turn of ankle. The arms below the sleeves were delicately moulded, the shoulders supple and broad. Blond hair lay swept back from her wide forehead, partly from natural tendency and partly from electric reaction.

Grant moved directly over her and studied her face. It was oval and intelligent, with rather high cheekbones and delicately pointed chin. The brows were smooth and the nose straight. She had a firm yet womanly mouth.

It suddenly dawned on Grant how utterly impossible the whole occurrence was. The laboratory was tightly locked. Only he and the Chief of Staff had the combination. By no possible means could this girl have entered here—and certainly the place had been empty before he had started up the generators. He recalled his final survey. So?

ALTHOUGH a scientist, he was only thirty-three, and he could not deny he experienced a certain thrill of pleasure as he raised the girl gently in his arms. There was something about the contact of her body. But her eyes remained closed, her arms limp. To all intents and purposes she was out cold. Grant took her across to the nearest bench and laid her down upon it, pulling off his



As Lana watched, Cal touched the keys of the control board and blast rays ripped forth everywhere

smock and rolling it up for use as a pillow.

A bell shrilled. He turned impatiently to the department telephone. The voice of Baltimore, chief of staff, was at the other end.

"Finished with Mutation Forty-two-G, Mayson?" he asked.

"I—er—yes, sir, I've finished." Grant rubbed his head. He was a trifle perplexed.

"Good! What results?"

"Results?" Grant looked towards the vacuum tube and gave a sudden start. "I don't know yet, sir. I haven't looked."

"Haven't looked!" Baltimore ejaculated. "How the devil much longer are you going to be? I'm waiting for your report. Or is there something wrong?"

"Well, not exactly, sir. I just—er—"

"There is something wrong!" Baltimore decided. "I'll come over right away."

Grant winced and put the receiver back. He realized now that he was in considerable difficulty. Women, unless they were technicians and specially authorized by the Science Council, were utterly taboo in the varied departments. Any infraction meant dismissal. And here was a startling and none too discreetly blonde lying out cold on the bench.

Grant was a fast thinker when it came to physics, but in this emergency he was stumped.

In the intervening time he tried to think up half a dozen places where he could conceal the lady, but none of them seemed practicable. He was still trying to make up his mind when the laboratory door lock clicked and Stephen Baltimore came in.

HE WAS a small, sharp-featured man, likeable enough in his way, but filled with the austerity inseparable from his high position.

"Just what is wrong here, Grant?" he demanded, striding forward. "You're taking the devil of a—great guns!"

He broke off, as he caught sight of the girl.

"That's the reason, sir," Grant said uneasily. "I give you my word that I don't know where she came from. I'd just finished my routine when I found her lying unconscious on the floor."

"Oh!" Baltimore said.

As a man of the world he did not commit himself any further for the moment. He went closer to the girl and stared down at her, stroking his chin, his eyes traveling down the rounded lines of her figure.

"Extraordinary!" he said, and coughed sharply.

Grant said nothing for the moment because he feared the wrong words might pop out.

"You realize this can be very serious, Mayson?" Baltimore's use of the surname showed he was on his high horse. "You know the rules. It is preposterous for you to say that this woman just—just happened. Science is not magic, you know. She must have been hidden here, or something, and the electricity discharge probably drove her out of concealment. Then she was overcome. She looks as though she has come from some kind of social party. The dress, I mean. Amazing material!"

"I don't agree that she was hidden somewhere, sir," Grant said, with sudden firmness. "This laboratory was totally empty when I began, and she was here when I'd finished. The only thing that happened between my checkup and discovery of her was the discharge of twenty million volts of electricity. That, under certain conditions, might produce many things!"

"But not a blonde, young man!"

Baltimore considered, then his sternness relaxed a trifle.

"I don't want to jump to conclusions, Grant, for if I do you may find yourself without a job. I don't want that. If you can find a logical reason for this occurrence, I'll ask the Council to give you a full hearing. For the moment this young lady had—er—better be removed to the hospital."

Baltimore paused and watched sharply as the girl suddenly moved lazily. In fact she would probably have fallen off the bench entirely had not Grant seized her shoulders. Languidly she sat up and opened a pair of very large, steady gray eyes.

Grant looked at her, and Baltimore peered over his shoulder.

"Who are you?" Grant demanded. "How did you get here?"

For a moment or two she did not seem to understand. Then she broke into a tumbling succession of strange words. Short little sentences with the words oddly broken off. At the end of two minutes of nonstop gibberish, she looked from one man to the other in plaintive inquiry.

"No good," Grant shrugged. "We don't understand you. Do you, sir?"

"Hanged if I do," Baltimore replied. "I'm not bad at languages, but this has me beaten. We'd better get the experts to work. . . .

Anyway, Grant, this lessens the charge against you. This girl is not ordinary by any means, either in language, looks, or—hmm!—figure." He glanced at her keenly.

"Fine girl, confound it," he growled.

Grant smiled in relief and by motions showed the girl that she was expected to stand up. She nodded her golden head and slid gracefully from the bench. She was about five feet eight tall, with the majestic carriage of a queen.

"This way." Balmore motioned, taking her arm. He nodded back at Grant. "Get the report of that mutation, Grant, then come along to the hospital. We'll see what we can do there."

Grant nodded, bitterly aware of the fact that he dare not show he was jealous of his chief's monopoly of the mystery girl.

CHAPTER II

The Council Decides

THE inexplicable arrival of a beautiful girl in a physical laboratory at the height of an atom-smashing process was something that captured the rather science-steeped imagination of the mass of people.

Dozens of stories were circulated, printed, radioed, and televised, few of which bore relation to the truth. The Science Council did not like it, either, and frowned with ever increasing severity on the hapless young scientist whom they deemed responsible for their sacrosanct laws being broken.

For all the efforts of Stephen Balmore, Grant found himself in an increasingly precarious situation. He had a week to find a reasonable explanation or else be dismissed. The fact that the language experts said the girl spoke gibberish did not count. After all, any girl could talk gibberish if she wanted to.

It appeared far more likely that for some reason the studious Grant Mayson had kicked over the traces and somehow gotten himself entangled. The scandal mongers worked overtime on this theory. As for the girl's clothing, dress designers were of the opinion that it was certainly rare stuff, but it could be an exclusive creation from abroad.

Grant saw the danger lights ahead. He went to visit the girl in her private room at

the hospital and struggled valiantly to get some sense out of her. Attired now in the clothes normal to the day and age, she had lost thereby none of her beauty but she had certainly become more bewildered. All she could do to Grant's impassioned questions was raise her graceful shoulders helplessly, or spread her hands, or—chiefly—just gaze fixedly with her big gray eyes.

"But, Miss Who-ever-you-are, this is awful!" Grant cried, pacing the room in agitation. "What can I do to make you understand? You must have a name, or something?"

"A—name?" she repeated awkwardly.

Grant pointed to himself and said "Grant Mayson" until his throat was dry. The girl gathered the implication finally and said "Iana" several times. Her name was at last established.

"You came here," Grant said deliberately, sitting down opposite to her. "Nobody knows how—but you do." Then as she just sat and waited, he sighed and rubbed his hair. "What am I talking about?" he groaned. "I might as well describe the calculus to a baby!"

He paused, his eyes brightening at his own unthinking remark.

"Calculus!" he repeated softly. "Mathematics! Say, maybe I have something. The law of mathematics is universal, according to the savants. Look, Iana, do you understand this?"

He whipped up a piece of paper and put three figures on the sheet—three figure 2's—drew a line underneath and added "6." The girl studied it for a moment.

After he had put four 7's she wrote 28 without hesitation. The figures she made were distinguishable, though not entirely normal in outline.

"You understand me!" Grant yelled. "We've mathematics in common! What else have you?"

Evidently quite a deal for, as he handed the paper to her, she went to work busily with normal figures, then complicated ones, and finally threw in a problem or two in Euclid for good measure. This done, and satisfied Grant understood, she began the execution of complicated formulae which made Grant, for all his pretty extensive scientific knowledge, frown deeply.

Finally he gave up watching her figuring and instead gazed at her intelligent, mobile features as she worked. He read sharp perception there, a great gift for abstract reason-

ing, purpose in the chin. This girl was not figuring for amusement, which was one reason why he felt there was deep meaning to the paper of figures she finally handed to him.

"For me?" he asked, pointing to himself.

She nodded promptly, then pantomimed an attitude of deep concentration, pointing at him earnestly.

"For me to study," he nodded. "Right, I will—though I don't think it's going to be a picnic. . . . See you later."

He left the room quickly and headed straight for the analytical department in his own place of work, where he could have the free run of the mathematical calculators which could do much of the work for him.

It was four in the afternoon when he went in and the staff, though curious, paid no attention to him. They had all gone and it was midnight when he had finished.

He smiled slowly to himself, rubbing his somewhat aching head as he surveyed the figures.

"So that's it!" he whispered. "She's told me, through the universal language of figures. I fit in the odd parts by my own imagination. The multibillionth chance came off! Wow, is this something for the Scientific Council!"

DURING the following afternoon, in response to his special request that his defence be heard, the Science Council met. They took their seats in the raised tiers and waited for the proceedings to begin. Grant was standing on one raised dais in the center of the huge room, and the unknown girl was poised majestically on a dais some yards from him.

Silent, some of them grim-faced, the scientists looked down on the two chief figures in the drama. On the one hand was a young man prepared to fight for his position as a scientist, and on the other the fate of an unknown girl was at stake. For unless some definite reason could be given for her presence, both in the laboratory and the city itself, law would demand her removal to a vagrant's colony, about the worst fate that could befall anybody.

"You have a solution to this—er—puzzling affair?" Balmore asked, as presiding chairman of the Council.

"I have, sir—yes. How much of it you and the gentlemen of the Council will believe depends entirely on your scientific credulity. Yesterday, this girl—who gives her name to me as Iana—handed to me a mass of com-

putations she had worked out. I have definitely established that she is a first class mathematician and—if we could only understand her—she is probably a first class scientist, too. However, I have the original figures here—" Grant waved a sheaf of papers in the air "—and my own studies along with the mathematical machines have worked them out. Iana explains her appearance amongst us as a multibillionth chance of Nature. The same kind of chance that might cause a kettle of water to freeze on a fire instead of coming to a boil."

"What precisely has that to do with it?" asked one member acidly.

"I am not a great scientist, gentlemen," Grant said quietly. "For that reason I would like to hark back for a moment to a master mind of bygone days—Sir Arthur Eddington. He sums up our case very neatly when he says—'By a highly improbable, but not impossible coincidence, the multibillion particles making up an organic or inorganic body might accidentally arrange themselves in a distribution with as much organization as at an earlier instant. The chance is about one in twenty-seven billion million, which proves that the world is a mass of probabilities, drifting towards greater and greater disorganization and final entropy.'"

"Yes, yes, quite," Balmore agreed. "We know the law of probability; entropy, and chance. But do you really mean to say that this young woman here actually came into being by—some law of chance?"

"Eddington, sir, approximates the time for the re-formation of a former mass of atomic aggregates into a prior setup at something like three million years," Grant answered. "That, though, is purely an arbitrary time: it could be longer, or shorter. What I say is this: The girl has existed somewhere before, and perhaps she died. Her atomic makeup was automatically dispersed, maybe drifted free in the cosmos but—by the law of chance, operating in a way it will yet take us centuries to fully understand—the exact aggregates, down to the last detail, formed again into just the identical pattern of a former instant. This fact, and the terrific electrical interplay in the laboratory—where those atoms at that moment must have been drifting, unresolved—brought about a sudden re-constitution.

"This girl took on a former pattern, even

*New Pathways in Science by Sir Arthur Eddington.

to the last jewel on her dress, and so—lives again! It might never happen again throughout eternity. But it happened this time! The multillionth chance came off! You have to admit, gentlemen, that you might take a deck of cards, shuffle it completely, and yet find it back in the original order when you examined it. It would be a multillionth chance, but it *could* happen! And it has happened here with this girl. . . .”

There was silence for a moment, the girl watching intently and Grant rather surprised at his own ready grasp of the complicated situation.

“Certainly,” Balmore said presently. “We admit the theory of chance, because we are scientists. But how do you account for the mind of this girl? If she once died, how does it happen that her mind is operating again?”

WITH knitted brows Grant considered the question carefully before replying.

“I cannot go into the deep issues with my limited knowledge, sir,” he answered. “But I do suggest to you that a mind is disembodied unless it operates through a particular configuration of atoms—a body. No two bodies are the same; hence none but the mind for that body can operate through it. It seems therefore that the mind of Iana operated perfectly through her former body. It became disembodied when her body died, but when the same reassembly appeared her mind automatically operated through that setup again.”

Once more the silence.

Then a derisive laugh burst from one of the members.

“Of all the preposterous theories to explain an unknown girl in a private laboratory, this is the most unique. I’ll see if I can remember it to tell my wife the next time I come home late.”

There was a titter of amusement and Grant looked round at the faces rather desperately. Head was nodding towards head, and it was clear, despite his leaning towards belief, that Balmore was obliged to obey the will of the majority.

After some minutes of whispered conversation he silenced the gathering with his gavel and then stood up slowly.

Iana, Mayson, Balmore and the other scientists gazed in awed silence through what appeared to be clear glass down into a great room where men were sitting at instrument boards



"I am sorry, Mayson," he said quietly. "Deeply sorry! But your explanation is not accepted. The Council rules that you be discharged from your position and that this unknown woman be handed over to the Vagrant Commission. Your duties will terminate at midnight tonight. The meeting is now closed."

Grant stared stupidly, stunned by the edict. Just as the assembly was about to rise the girl herself hurried forward from the dais, waving her hands imperiously.

Everybody paused, and Balmore waited expectantly.

"Wrong!" the girl insisted, and repeated the word several times. "Grant Mayson right! I—I—" She waved a helpless hand as she searched for the right word. "I—prove!" she exclaimed finally.

"So she does talk English after all?" a member observed drily.

"Why not?" Grant demanded. "She is a highly intelligent woman, and I spent a lot of time yesterday trying to find a few words she could understand. She's been here long enough to have picked up smatterings, anyhow. Give her a chance, I beg you!"

THE girl glanced at him anxiously, then back to Balmore.

"Prove!" she repeated urgently, pointing to herself. "First—first learn—er—language."

"That's fair enough," Grant cried. "Get the best linguists in the country and in two weeks she'll talk better than any of us. You just can't condemn her, and incidentally me, without a hearing."

There was a momentary hesitation, and Balmore seized his opportunity.

"That is fair enough, gentlemen," he said. "That the explanation is strange, even fantastic, does not mean that it should be condemned summarily. At least, as scientists, we should give the unusual every chance to prove itself. Am I right?"

Gradually heads began to nod, and finally the majority raised their hands in agreement. Grant looked round with a sigh of relief, then hurried forward and caught the girl's arm.

"Can I make this my own responsibility, sir?" he asked, and Balmore gave a grave nod.

"You can. Miss—er—Iana will remain at her room in the hospital, and there will be special hours allotted for you and the linguists to see her. Upon that decision the Council rests."

CHAPTER III

Iana Demonstrates

AFTER getting this reprieve, Grant Mayson wasted no time. He summoned language experts from all parts of the country to pour forth their knowledge to the eager, interested girl. Now that she realized something definite was afoot she was desperately anxious to learn—as indeed were the linguists to gain the rudiments of her own odd language.

For a week the exchange went on—for a fortnight. At the end of that time, thanks to a ready brain and every modern invention for expressing phonetics and inflexion, the girl was word perfect. But her mentors were baffled. Her own language was utterly unknown which, if anything, served to strengthen the case for her and Grant.

"Before we go to the Council room again tomorrow morning," Grant said seriously, paying his nightly visit for the fourteenth time, "can't you tell me beforehand what this is all about? I mean, I sort of feel entitled to it."

She smiled gently, laid a delicate hand on his arm.

"Of course you are entitled to it, Grant. But, told in plain, cold words such as I have learned it would not even be credible. To explain in detail I need to use telepathy, the science of the mind. Then, and only then, will you and the other scientists thoroughly understand the truth."

"Oh!" Grant looked at her beautiful face intently and he frowned a little. "But—but to do as you say would mean the absolute control of the minds of your listeners, wouldn't it?"

"Of course," she agreed simply.

Grant got to his feet and began to pace the room slowly.

"You can't just say that, Iana. I don't know yet where you come from, but I do know that we at least are limited to the merest outlines of telepathy. It is only with difficulty that we can send a mental message across a gap, and even then we sometimes need electrical amplification. Yet you casually suggest bending many wills to your own. It can't be done!"

"Yes, Grant, it can," she answered, quite undisturbed. "I understand telepathy com-

pletely. I know I am dealing with a race of people not particularly clever. By that I mean that they do not understand, as yet, the secrets of radiant energy, pure atomic force, ethereal waves, and so on. In fact, so far, you yourself are about the cleverest scientist I have encountered. You *are* clever, you know," she added seriously, as he looked at her in surprise. "You worked out everything from those figures I gave you, just by using your imagination. That signifies mental ability of a high order. It's funny, really."

"How—funny?"

"You remind me a little of Cal Anrax." Her voice had become quite wistful now. "He was clever too, and a marvelous scientist. We were to have been what you call married, only—Well, he was a wonderful man with a fine, keen brain. And yet he was so gentle, so fine a ruler. You remind me of him quite a lot, even in appearance."

Grant looked at her wide gray eyes fixed upon him, and gave a little cough.

"I'm not so hot, Iana. I'm just a routine scientist with a liking for the unexpected and a gift for solving scientific problems. As for this genius of a Cal Anrax, your marriage, and the reason why it didn't come off—well, it is what we call double talk. I'll need the facts before saying anything."

"And you shall have them, tomorrow," she promised, and from that moment Grant lived only for the following day.

When he and the girl faced the Council again she simply repeated all that she had told him—that telepathy alone could make matters clear.

"Then what do you suggest?" Balmore asked. "There are two hundred of us here. You do not seriously suggest that you could get the whole two hundred of us in sympathy with your own mind?"

"With so much disbelief, no," the girl admitted. "What I would like is for six of you who are willing to believe—which includes you, Dr. Balmore—to become willing subjects of my experiment. It will not take long, no more than an hour. But in that period I can make everything clear to you, can outline a history such as you have never dreamed of, and which will add itself to the annals of your own scientific records."

"You mean here—now?" Balmore asked, wondering. Iana nodded her fair head.

and with four other members stepped down from the highest tier to the center of the big floor. Grant too moved from his dais and joined the little group.

"Sit down," the girl invited—and chairs were brought. At her orders the six men made a circle with her in the center, standing, and looking at each of them in turn.

"I would like the windows covered," she added, glancing round, so Balmore gave the order and deep gloom fell upon the big hall. To Grant, watching intently, the girl's figure remained faintly visible as she moved to look at each man closely.

Then, gradually, as she stood before him at length, he felt a strange sensation creeping over him. A lack of interest in his surroundings, deepening into an intense, dreamy lethargy. The girl's voice floated to him—reedy, faraway.

"What you will shortly experience will be the objective viewpoint of a projected mind—*my* mind," she explained. "You will gaze upon scenes and incidents, be a part of them, and yet in no way connected, just as you would watch the unfolding of a play on a telescreen. All that you will see is fact, based upon my own experience, as I know these events happened. The remembrances of my mind will communicate themselves to you and finally—I trust—you will understand. . . ."

She ceased talking and there was a heavy silence. Grant—all the men present indeed—felt their senses slipping. A whirling, impalpable darkness closed in. . . .

* * * * *

Evening had settled over the Martian landscape. Over the ruling city of Jaloon with its wilderness of white, delicately tapered buildings, across the fields and grazing land that surrounded it, the sky had the violet tinge of twilight and stars winked through the warm air. Out in the west a single wisp of amethyst cloud traced the sun's departure.

There was quiet—the deep quiet of a city that has conquered the distraction of noise. Deeply buried power houses made not a sound—the airliners creeping down to their distant bases might have been drifting leaves—the textalian rubber streets absorbed completely the sounds of endless traffic.

As the darkness deepened lights sprang up simultaneously all over the city, steady, white, shadowless lights which threw the buildings into brilliant relief.

Cal Anrax, standing on the balcony at the summit of the city's controlling building,

IMMEDIATELY face bent towards face in consultation; then at length Balmore rose

gave a little sigh. The peace did not delude him in the least. News which he had received only an hour before only made it look all the more deceptive.

He was a tall man, spare and sinewy, the strength of his still young figure revealed by the brief, togalike costume he wore. Brown, muscular hands gripped the safety rail. His face had something of the keen steadiness of a poised eagle as he looked out over the expanse.

A light footfall disturbed his thoughts and he turned sharply. The brief impatience on his strong face faded into a smile of welcome.

"Iana—dearest. I wondered if you would come."

"But why not? You sent out a summons for me, didn't you? You hinted at news of importance."

"Yes. I am afraid it is all too important."

Cal Anrax's eyes studied the girl for a moment—slender, blond, gray-eyed, the soft night wind moulding her white, flowing gown against the smooth curves of her figure. She in her turn stood waiting, anxious.

"I've received serious news," Cal Anrax went on, looking back at the city. "We are on the very verge of war. As you know, it has been hovering like—like some primordial menace for the last two years, and now it has flared into imminent nearness. I dare to think that before dawn invasion will have commenced."

"Vaxil!" The girl's lips set bitterly.

"Yes, Vaxil." Cal Anrax turned back impatiently into the expanse of his controlling office and the girl followed him slowly. "It has been perfectly obvious, Iana, for long enough past that Vaxil has been heading for war. A clever scientist, but not so clever that he cannot see that war only ends in destruction for all. However, the uncomfortable fact remains that he owns half this planet, and we own the other half. We—more by luck than judgment perhaps—have a united, peaceable people behind us. Your father handed over the control of the Western Hemisphere to me on his deathbed, and the people have taken to me kindly. . . ."

HERE Anrax paused for a moment, as memories stirred within his mind.

"Our peace, our quiet scientific progress, does not suit Vaxil or the people of the Eastern Hemisphere," he continued, after a moment. "They have not our sense of restfulness. The spirit of aggression is deep within

them. Why? Because Vaxil is not a good psychologist. He invents laws that only irritate his people, under the mistaken impression that he is doing them good. They cast their eyes our way and see peace and progress.

"If, perhaps, they could conquer us and have the whole planet instead of half of it then—they reason—they too could have peace and advancement. So Vaxil has told them, anyway, because he won't be content with anything less than the entire domination of Alron. . . ."

"An hour ago, Iana, I received news over the telepath that a massive armada of air machines and a million land cruisers are ready to move. A robot army of five million is ready too. That can only mean—war."

"Yes, war," the girl muttered. "To me it will be a new experience for there has been no war in two centuries, when the subdivision of the two Hemispheres was agreed upon. I've only seen the conflict in the records or heard it over the sound recaller. But now— Cal, dearest!"

She caught at his arm suddenly.

"Can't you make a last appeal to reason? Send out a message to Vaxil and everybody in the Eastern Hemisphere. You are the ruler here, as fine a one and as great a scientist as any that ever lived. I beg of you to try it—as your betrothed, not as your royal adviser. As a woman, my whole soul revolts against this impending, senseless bloodshed."

Cal's firm lips broke into a faint smile. He put an arm about the girl's shoulders and kissed her gently.

"How many women, how many betrothed, have perhaps asked that of a man down the centuries?" he murmured. "I respect your motives, the sweetness of your sex which is revolted by this beastliness. But I am the master of a Hemisphere!" His voice grew stern. "The ruler of ten million happy people—scientists, all of them, with a right to live and challenge all the devils of hell if their progress be threatened."

"I shall make no appeal to reason, Iana. I shall destroy Vaxil and all those who try to attack us. Believe me, this has not caught me unprepared. You see no airplanes, you see no tractors, you see not a thing to prove that our Hemisphere is defended. But it is! For two years I've made preparations, so secret I did not even dare to tell you."

"I should have known," she said quietly, smiling. "Just for the moment I thought we

were unprepared. . . . What happens now?"

"We go below," he answered briefly. "My headquarters are duplicated to be the same a mile under the ground as they are here. I can have around me every scientific need for the direction of the battle—every eye and ear of science to see what happens. You must come with me. Alone there, with the fate of millions in my hands, I should feel none too sure. But with you, wife-to-be, I can do anything!"

He took her arm, and without further argument she followed him across the big room to a shield in the wall. Pressure on a button sent it sliding up soundlessly. They stepped into a small elevator and pressure on another button released the compressed air from beneath its floor. Swiftly, without any sensation of falling, they dropped a mile into the earth and stepped out into a huge room—flooded with light—which was an exact replica of the office they had just left.

Behind them, as they walked forward, the tertanex shield went back into place. Hardly had Cal reached the control desk with its seven hundred vital buttons before the intercom radio buzzed for attention.

"Yes?"

A uniformed guard appeared on the teleplate.

"Evacuation is complete, sir, and all trained scientists have been directed to their positions."

"Good!" Cal closed a switch and snapped another one urgently as a priority-screen glowed urgently for attention. It was the unemotional face of the Directional Tower Controller which appeared.

"Invasion has been launched from Eastern Hemisphere, sir," he announced briefly. "First aerial armada due in five minutes."

"Right!"

Cal Anrax's blue eyes hardened for a moment and his lean jaw tightened. He spoke briefly into a microphone.

"Follow out Combat Plan Seventy-seven-SA," he ordered. "Report in fifteen minutes. I'll handle the rest from here."

He switched off and sat down in the control chair, motioned to Iana to settle beside him. She obeyed without uttering a word, unwilling to disturb his concentrations. In silence she kept her eyes fixed on the giant central screen which gave a complete televised view of the city and landscape outside.

CHAPTER IV

Red War

IT WAS not long before menacing shapes appeared. The night sky outside was presently patterned by dark, swiftly moving shapes. With the moments they came so thick and fast that the stars themselves were blotted out.

Then came hell itself! Concussion smote the city, concussion so violent that even at this mile depth the buried control room quivered under the impact.

Again—and again—until the quivering merged into one complete vibration. Cal Anrax gave a grim smile. His lean fingers began to play over the control keys in front of him as though it were a complicated organ. Iana, though by no means an amateur scientist, could not even hope to guess at the subtle mechanics involved. Cal Anrax himself

[Turn page]

**TOPS
FOR
QUALITY!**



had invented this master-keyboard, the brains of a city's defense, and since he was the greatest scientist the Western Hemisphere had ever produced there was no point in her questioning him.

She caught her breath suddenly and watched intently in the major and minor screens as the swarming armada of bombing planes was suddenly changed from a dark, shapeless mass against the stars to a plainly outlined solid phalanx of fliers. Secret flood-lighting, directed from the bowels of the city and merging into one flaring sea of light, had every section and fragment of the attacking fleet enveloped in an effulgence as bright as day.

"Now we can see what we're doing," Cal murmured, his fingers still playing on the keys.

The automatic defenses of the city came into being immediately under his remote control. Blast rays ripped forth, leaving a wake of condensation in the air. Neutronic guns hurled their deadly load into the bellies of the fliers. From directional towers at the city's four corners radiant energy spread forth in its basest and most deadly form, heating the attackers to an intolerable degree by the sudden kinetic interchange.

Chaos broke loose.

The fliers turned and twisted and dived to escape one defense and ran smack into another. Three planes crashed and their bombs with them. Others fell in the middle of the city and exploded with cataclysmic violence. Cal had formed a complete trap round the city. To escape from the neutron guns meant colliding with the radiant energy waves, and to escape from those meant running the deadly battery of blast rays.

Not that the city itself was improved by the counter onslaught. The bombs fell just the same, sowing ruin in a criss-cross pattern. The intercom buzzed and Cal flicked the switch.

"Land armor invaders two miles south of city, sir," said the impartial Directional Tower Controller.

Cal nodded and threw another series of buttons into commission. Out on the city outskirts another mass of scientific equipment moved to the ready—

Then, abruptly, there was a concussion so violent from somewhere above that the underground room rocked beneath it. Cal found himself half flung from his chair and Iana went pitching against the control board.

Other things had happened too. The flaring illumination light on the armada had vanished. Cal's frantic play over the switches failed to have any effect in any direction.

"The devil!" he breathed, staring at the power-meters fixedly. "Look! Power's stopped!"

He met the girl's wide, anguished eyes.

"Only one explanation," he said bitterly. "Somewhere we have a traitor amongst us—a thing I could never have expected. I was of the opinion we were united. That concussion we felt. It must have been from the major power room buried a mile away. All my apparatus was powered from there. And somebody's destroyed it!"

For a moment he seemed incapable of thinking. He stared mutely at the giant screen, operating from its subsidiary unit. He winced at the concussion of a rain of explosives from above.

"I can't fight the inevitable," he whispered, clenching his fists. "Without power we're helpless." His hand reached out for the microphone. "Good job the subsidiary unit feeds the radio equipment and lighting anyway. . . ."

"But what are you going to do?" the girl demanded, catching his arm.

HE LOOKED at her steadily.

"I am going to surrender."

"But you can't surrender! Don't you realize what it means if Vaxil gains control of our Hemisphere?"

"Of course. But I also realize that he has got control already. I can't fight without weapons, and the only way to save something from the wreck is to surrender on the best terms we can get. It isn't cowardice, Iana; it's common sense. It isn't his scientific skill that has given him the victory; it's my own stupidity! For one thing I trusted the people too much and did not suspect a possible traitor, and for another I made the fatal mistake of concentrating all my defensive power in one spot. With the heart destroyed, so are we."

Cal turned and switched on the microphone.

"Cal Anrax speaking," he announced briefly. "Put me in direct touch with Vaxil over priority waveband."

There was an interval, then out of the lambent weavings of color on the screen the stern, sharply chiseled face of the Eastern Hemisphere ruler appeared.

"You have something to say?" he asked, laconic as always.

"Only a few words," Cal answered in a quiet voice. "I am prepared to surrender. What are your terms?"

"Unconditional! With your main source of power gone what else do you expect?"

"What does 'unconditional' constitute?" Cal asked.

Vaxil reflected for a moment.

"You are a brilliant man, Cal Anrax, and a scientist like myself. For that reason I am inclined to extend clemency. The terms I impose demand your personal surrender to my commander in the field, together with the personage of the Princess Iana and the twenty men and women who form your Government. That done, I will decide what shall become of you."

Cal was silent, his lips tight. He glanced at the girl.

"You have no alternative," she said, low voiced.

Cal turned back to the instrument. "Very well, I agree. Instruct your field Commander to meet us in Central Square within an hour, hostilities to cease forthwith."

Vaxil nodded and switched off his instrument. Cal did likewise, sat for a long moment in thought, then with a shrug of his lean shoulders he got to his feet.

"Does this mean—death?" the girl asked soberly. "Tell me if it does, Cal. It's only right that I should know. I'm not afraid to die."

He put an arm about her.

"Everything depends on the mind of Vaxil, dearest. He is not a vicious man, a swaggering conqueror. He fancies himself as a kind of magnanimous superscientist, and for that very reason he may flatter himself by showing us the courtesy to which our high rank entitles us. If we escape death, there is much I can do. If not—well, we'll have to face it. We'll give them time to call off the war dogs. Then we'll go up to the surface."

Iana got to her feet and stood in despondent silence. Cal looked at her and smiled tautly.

"This isn't the end, Iana," he said gently. "If life is still permitted to us we can yet avenge these wrongs. I shall live only for that! Remember that I am a better scientist than Vaxil. I've made a mistake this time, and I admit it. But give me the slenderest chance to turn round and fight back and I'll smash Vaxil forever. I'll reclaim not only our own Hemisphere but conquer his as well.

You'll see."

It was three days later, with Vaxil fully in power in Jaloon, before Cal Anrax and Iana, with the men and women of their former Government, learned their fate. They were summoned before the Grand Council of Conquerors in the city's administration hall, and in silence listened to the Eastern ruler as he spoke from the head of the council table.

"Death is the obvious answer—but by no means a sensible one," he said slowly. "Only fools destroy people who are clever scientists. Yet on the other hand, if I permit you to live on this planet there may come a time when your ingenuity will prove to my detriment. So, I have to choose between that possibility on the one hand and death on the other. That leaves only one course—banishment!"

CAL ANRAX tensed a little and cast Iana a quick look. Around them the assembled men and women waited, grimly silent.

"Not banishment to another part of Alron where you might make an effort to regain control," Vaxil proceeded. "I mean banishment to Vinra, the second planet from the sun. It will be to another world altogether where you cannot possibly make any attempt to strike at us! By the same token you will be able to make a stand for yourselves. Whether you die or prosper, whether you marry and bring forth young to carry on your struggle, will be up to you. In the records of this world at least you will be known as the 'Outcasts!'"

"But Vinra is a terrible world!" Iana cried. "Scorched and frozen, not a scrap of water, a planet long since abandoned by our space expeditions as dead. It's a graveyard, and you know it!"

"Perhaps," Vaxil replied coldly. "You are such ingenious scientists that you might make it habitable—though I do not say how. At least, if you die it will be your own fault and I shall not have it on my own conscience. It is not our intention that you should be hurled to this arid, merciless planet without even the means to save yourselves. I and the Council are in agreement that you be allowed six hours consultation among yourselves to decide what equipment you wish to take with you. Two space cruisers will be placed at your disposal, but the controls on both will be locked so that you can only land on Vinra and nowhere else. When you reach Vinra automatic devices will destroy the motors so that no return is possible. One ship will carry

you and your compatriots, and the other the essentials you have chosen for your new life. Have you, Cal Anrax, anything you wish to say?"

For some reason he smiled slowly.

"No, Excellency—except to express my thanks for your leniency. As the vanquished, we rather expected instant death. All I ask is that I be allowed the consultation immediately."

Vaxil rose to his feet and motioned to a bronze door leading from the hall.

"You may retire immediately to the anteroom. When you have reached your decision press the signal button and you will be released. The Council will then consider your report."

Cal Anrax nodded and led the way across the hall, into the broad expanse of anteroom with its long shining table and polished chairs. He took up his position at the head of the table, Iana on his left hand side, and looked down the two rows of faces, the men and women whose lives were virtually in his hands.

"We comprise a new race," he said seriously. "On the face of it that sounds a big assertion, but it is true. Banishment to another world means just that, especially when that world is known to be dead. When we arrive there, union and children will be our only means of perpetuating the race. To that, however, we will give our attention later. For the moment I believe that Vaxil's lack of perception—his belief that we can do nothing to avenge ourselves if banished to another world—has placed a supreme chance in our hands. I take it that we are agreed on one thing only—vengeance?"

The men and women nodded firmly, and the look in Iana's gray eyes was sufficient for Cal.

"Good!" he nodded. "I do not mean the impetuous violence of revengeful fanatics, or the half-hearted effort of the spiteful—but cold, deliberately planned, scientific reprisal! Vaxil and his cohorts have got to realize, sooner or later, that the science of the Western Hemisphere cannot be so easily disposed of. I suggest, therefore, that in our choice of materials for our new planet we take only enough provisions for two years and make up the remainder of our equipment in machine tools. Arms we shall not need since the planet is known to be quite dead."

"Machine tools?" Iana repeated, mystified. "But Cal, we shall need homes, protection

from the terrible heat and frost. I am of the opinion we ought to take twenty-two prefabricated homes."

"No!" Cal shook his head firmly. "We'll find places to shelter, even as our ancestors did. Caves if need be. What we need are the tools to make tools, machines to mould metals, equipment to gouge out the solid rock, instruments to create synthetic clothes and food—in fact an assortment of machines to build us gradually into a prosperous power which, sooner or later, through the very use of those machine tools, will give us the chance to avenge!"

"Behind all this, I sense that you have some mighty scheme," Iana said slowly. "None of us here is as expert in science as you so maybe we cannot see your purpose. I'm prepared to trust your judgment—to the limit. And you others?"

The men and women looked at each other, murmured among themselves for a few moments. Then the chief physicist stood up.

"We agree, sir," he announced. "The example set by the First Lady of the Royal House is sufficient for us. You'll have our full collaboration."

"Good! Later you will see how right I am. Now, here are the machines I suggest we take. . . ."

And thereupon the debate on machine tools began—and lasted for a couple of hours until a fully detailed list was drawn up. The matter of immediate requirements in food and weapons was simpler. In four hours they had everything decided to their satisfaction and Cal Anrax signaled for release.

CHAPTER V

Dedication to Vengeance

SILENTLY Vaxil and the Council listened to the list of requirements, and evidently they saw no ulterior purpose behind it. Nor had the room been wired for sound so that any secrets could have been betrayed. Cal knew at least that in Vaxil he had a man who rigidly adhered to the laws of statecraft.

"Very well," he agreed, when he had finished consulting his colleagues. "Your requirements will be granted, Cal Anrax. The second space cruiser will begin loading immediately with the machines of your choice,

together with provisions in the first cruiser for your own use. You and your colleagues will spend the night in captivity as before and will prepare to depart at dawn. You, Cal Anrax, will be given the opportunity for a final checkup on the second cruiser's contents before departure is made. It will be for you to choose a pilot from amongst your followers."

Cal nodded.

"Very well, Excellency. I have assigned Ralix, my chief physicist, to that task."

Vaxil rose to his feet.

"The matter is decided. Guard, return the prisoners to their rooms." . . .

Dawn was just streaking the eastern Martian sky when the space cruisers departed. Below, in accordance with traditional ceremony, Cal and Iana watched the puffs of smoke dispersing from the firing of the twenty protonic guns in farewell salute.

Then the busy world of their birth was falling away swiftly into the gulf. It became a wide landscape, circular, a concave circle, and at last a globe. . . .

"The end of an old chapter and the beginning of a new," Cal said quietly, turning back to the control board. "Now we are really launched on a mighty venture."

He closed a switch and the face of Ralix, controlling the following cruiser of equipment, appeared on the screen.

"Everything in order?" Cal asked briefly.

"Everything, sir," the physicist agreed. "I'll follow out your directions and report any trouble the moment it arises."

"That will be Vinra itself, I'm afraid," Cal said, smiling wryly. He switched off and gave his attention to the board in front of him.

It was the beginning of a long, tedious journey. All of them had made space trips before—to Deimos, Phobos, or brief excursions to highly valuable meteorites—but this was the first time they had made a really long trip. Formerly such journeys had been the lot of tough space explorers.

If there was fear, none of the men and women present showed it. They disposed themselves in various parts of the big control room, or watched the eternal stars through the ports. Iana, for her part, busied herself in the section given over to sidereal analysis, gathering together what facts she could from the pin point of bright light towards which they were heading.

Day and night—they were the same thing with the eternal blaze of the sun. Steadily,

the motors fixed and unalterable, the vessels pursued their course at swift cruising speed. Cal and Ralix both were relieved at intervals by robot controls.

Onwards past the mystery green world, third from the sun, which space explorers had found to be a planet as yet infinitely young, filled with swirling gases, torrential rains, and chaotic landscape. A world to be—some day.

Half the journey was covered in tedious monotony—three quarters. Then at last the blinding white world of their destiny filled the entire ebony void ahead of them. There was no sign of anything except eye-searing whiteness, an arid waterless landscape exposed to a nakedly near sun. Serried mountain ranges powdered with snowy dust, monstrous fissures and ravines, endless plains wherein clouds of white powder whirled up to the zenith in the thinnest of thin atmospheres.

"Gravity nearly double that of our own world," Iana said, consulting the instruments. "Atmospheric density about a quarter less than our own. That means extreme thinness. Very great heat—about two hundred degrees."

"In fact all the things we don't like," Cal sighed, staring down through his purple goggles. "This world is going to play the very devil with our bodies, but maybe we'll struggle through. Here we go."

He broke off, as the last stage of the journey began.

THE tension was nerve racking as they had no control over their fall. The crazy, tortured landscape rose up towards them with seemingly diabolical speed. Then they began to feel the power controlling the motors lessen somewhat. The noses of both machines rose gently preparatory to leveling out. Giant rockets in the forefront flared red. On the control board screen the face of Ralix appeared, strained and anxious as he crouched over his controls.

Then, sweeping forward in an immense arc, the leading machine landed and sent a fountain of dust five hundred feet into the air. Uncontrollable, it slithered for nearly half a mile and halted near a ravine. To the rear the second machine performed the same gyrations and finished up at right angles to them.

The motors stopped, and from somewhere in the power plant came the dull concussion

of a small explosion. Fumes began to leak out into the control room from the engine casing.

"There goes our central transformer unit," Cal said grimly. "Vaxil was not pretending. He has destroyed our chances of return. Obviously here we are and here we stay."

Nobody spoke. The death of the power unit seemed trivial compared to the scene about them. In every direction was a vast desert of sun-blistered sand, cracked by gorges, soaked in the withering heat of a sun only 63,000,000 miles away. It was a planet without the protection of clouds, a planet from which the sun had long since whipped water and nearly all the atmosphere. Vinra—sunblasted for 720 hours and frozen for another 720—without life, without hope. . .

"It's—it's frightening," Iana whispered at last, turning her goggled eyes away from the port.

CAL ANRAX smiled faintly, that look of the eagle on his face.

"Yet it has to be conquered, dearest. And it will be!"

Only by degrees, when Iana and the others began to see—as Cal Anrax had seen long since—that their domicile on Vinra was permanent, did they make real effort to conquer its pitiless conditions.

The terrible sunshine, the scorching winds from the dusty rainless plains, the incessant glare which stung the eyes and blistered the skin, made outside investigation almost impossible during daylight. Seven hundred and twenty hours of it, and a night of almost equal duration—and even worse climatically—when the moon rode the sky in pallid grandeur and thick hoar frost descended the moment the heat of the day had radiated off into the vacuum of space.

Cal Anrax took the only course and, space suited and goggled, with the strongest men in the party similarly attired to help him, he set about the task of building a habitation for them all—not on the surface though, for two reasons. One was the merciless climate, and the other was because the plan he hoped ultimately to mature demanded underground protection.

Long, hard, tedious weeks passed into months. Metals were sought and found below surface, were fashioned in furnaces with the machine tools and thereafter used for moulding the raw materials into the desired shapes.

For Iana, for each man and woman in the group of twenty, there was work to do—and they did it with a will because in such work lay their one hope of salvation and the defeat of the insanity which such a frightful world could easily have caused. They made the first cruiser their base, and through the weary, dragging months of alternate sun and frost they created a small underground city half a mile below the surface.

At least they could work uninterrupted. There was no sign of life on the dead planet. Apparently it had died young, its vapors dissipating rapidly due to its extreme nearness to the sun.

Slowly, surely, with the masterful genius of Cal Anrax at the head, the underground city grew from its first crude rudiments into a worth while expanse, well lighted, and with all modern amenities. But it took three years of drudging labor to create all the metal buildings they needed. Several were set aside as machine-tool buildings only. There also were well planned streets and synthetically created fields of pulverized rock and fertilizer, irrigated by synthetic water, fields which were already sprouting with the edible roots necessary for staple foods.

AT LAST Cal reached the crowning point of endeavor. He summoned everybody to his own particular domicile for a conference.

"We have a habitation, half a mile below the surface of a devil planet," he said slowly, his fists clenched. "Vaxil thought we would die, and well we might have done so but for our purpose and energy. But the time has come now for vengeance—the vengeance I planned long ago when we became outcasts! And now it becomes doubly necessary because from ultra short wave messages I have picked up it is clear that revolution has broken out on our home planet and practically all our friends in the Western Hemisphere have been slain. For that Vaxil and his remaining hordes are going to pay a deadly price. I planned it long ago but hesitated over putting it into action because it would have meant destroying many of our own Western people. Now that deterrent is removed.

"I am going to make this world fertile and destroy Vaxil and his followers at the same time. That, I consider, is just reprisal. . ."

"How?" asked Iana quietly.

"I propose to steal the air and oceans of our home world!"

There were a few gasps and startled glances.

"But that's impossible!" protested Ralix.

"No, my friend; I have it all worked out—and here is what we shall do. We shall require a tower rearing to a thousand feet, and sunk to half that depth in solid bedrock. We have unlimited metal and power now, so we can do it. Scientifically, we know that gravity is a force, that it can be heterodyned as radio waves can be heterodyned. I propose to direct a heterodyning beam across space to our home world, which, upon striking it, will encompass about a thousand miles of the surface.

"This beam will be in the center of what I might call a funnel of force—or in other words walls of vibration solid enough to withstand the sudden uprushing vortex of water and air. With part of the home planet degravitated, and this force funnel right over that part, the air and oceans will be sucked up the tunnel by following the course of least resistance. But for our force funnel they would spew sunwards, hence the presence of the funnel to hold them in their fixed path until they deluge down on the surface of this dying world.

"It means the total destruction of our home planet—on the surface anyway. But for two reasons it must be done: One, as revenge; two, because to expand and grow we must live on the surface. We can do this if my plan works as I think it will. . ."

THERE was a long silence as the assembly thought it out.

"How long is such a mighty project going to take?" Iana asked.

"Two years, maybe. Time is not the factor: it is the ultimate result. Place your faith in me again and I guarantee that the science and direction will be there. We can do it, if all of you agree. If you do not we shall rot out our lives slowly on this dead world, down here. Marriage and children we cannot even contemplate until we are sure we have a worthwhile heritage to hand on. We can have one. That is up to you."

Finally Iana made up her mind. She raised her hand in assent. Gradually the others followed suit until every hand was raised. Cal Anrax looked at them and nodded with satisfaction.

"I thought I could rely on you. So, now to work. Here are the draft plans I've worked out."

CHAPTER VI

Reprisal

FROM then on his mighty scheme developed. A nearby mountain range was selected and a site chosen. Scientific machines and implements were transported thither. The outcasts worked like ants against the glaring heights by day, toiled with cold light globes at night, aided by robots, struggling, building, erecting a mighty latticed tower of metal supported by cross-pieces.

It took a year to complete it, its supports sunk deep into the virgin rock. Then came the harder part which Cal Anrax himself had to supervise in the laboratories—the assembly of the heterodyning apparatus, all of it fixed in massive gimbals to allow universal movement.

The actual source of power, to pass through the graded lenses of the heterodyners, was deep in the underground city, controlled much the same as his former automatic defensive machinery. And this time there would be no traitor to foil a mighty endeavor.

Even when the array of tubes, electromagnets, and anode and cathode globes roped together by stout cables was finished, the work was not over for Cal Anrax. He had to calculate to a fraction the positions of Vinra and his home world so that no mistake could happen over that distance of 73,000,000 miles. It was a difficult calculation which needed the mathematical machines to check and double check. But it was done.

Two years and four months after he had mooted the project he was ready, deep underground with his followers in the special projection-laboratory, the television screens connected with the surface already trained on the tower and the moonbathed, brazenly clear landscape.

"We're ready!" Can Anrax breathed heavily, his eyes moving to the synchro-clock and his hands on the master switch. "In five seconds exactly."

The deliberate seconds ticked by. On the fifth one the master switch closed. Instantly energies, terrific in violence, were released, absorbed as they had been through twelve months from the blazing sun itself. The laboratory quivered in violet flame and

reeked with ozone.

Bolt upon bolt of energy slammed into the transformer chambers and were hurled thence to the complicated apparatus atop the giant tower.

Every eye fixed on the telescreen. And, suddenly, a lavender beam poured forth from that heterodyner, stabbed like a blinding amethyst searchlight into the starry sky and became lost in remoteness. The arid plain outside hazed with lavender electric interplay.

Six and half minutes to cross the gulf of 73,000,000 miles.

The synchroclock sliced onwards as the power remained constant, as the din increased, to hellish fury.

What happened on their home world the Outcasts could only guess. They could imagine the tumult, the inconceivable upheaval which must have suddenly descended out of a clear sky. . . .

But at last, timed to the second, the visible evidence of their labor was there. The heterodyner atop the tower dimmed as the first conglomerated mass of air and water from the home planet came.

It spewed out through the center of the apparatus—a titanic tumult of ice shards which struck the mountain range and rebounded in an avalanche. It became greater, mightier, blotting out the screen, the tower, even the skies themselves. Even down in the underworld the assembly heard the incredible roar of frozen matter thundering down on their dead world.

Cal Anrax cut the power and smiled like a ghost.

"A world has died, and another has been born anew," he said quietly. "With the dawn we shall see what has happened. I fancy that by now Vaxil knows the cost of trying to dominate a planet."

The others, even Iana, were silent. The terrific power of the science they had just witnessed had left them subdued and just a little incredulous. . . .

To the dawn was six hundred hours, and when it came the Outcasts saw more things than a rejuvenated world. Indeed they had hardly gone to the surface and looked out upon a desert turned green, at a distant inland sea, at dense clouds drifting across the sky from the condensed moisture, before other matters took their eye.

Across the sky, just below the clouds, angry as buzzards, swept massive space war-

cruisers, bearing the insignia of the home world.

CAL and Iana, standing at the sheltered top of the underground funnel, half way up the mountain side and therefore high above the flood waters, watched the fliers for a while as they searched ceaselessly. Then finally they turned and vanished in the clouds.

"Cal, they guessed," the girl whispered, catching his arm. "They've come to look for us, to destroy us if they can. They must have come while we were below during the night. They had ample time."

"They'll never detect us though," Cal answered, thoughtful eyes on the sky. "They must have a refueling base somewhere near at hand. They wouldn't send just a few cruisers. There'll be a whole fleet I expect, if they got away in time. . . A base!" He snapped his fingers. "That gives me an idea. Come on back below."

Iana accompanied him to the main laboratories when they arrived in the city again. He went to work immediately with the X-ray telescope, probing through the rock barrier and clouds in all directions, scanning the void above and at the antipode. At last he settled the scanner-lens on the moon and operated the controls swiftly.

On the mercury-sunk mirror the hard, dead surface of Vinra's small satellite came into view, and upon it—facing Vinra—were a mass of minute black oblongs in orderly rows.

"There they are!" Iana cried excitedly. "A whole armada of them!"

"Yes." Cal Anrax frowned. "Enough to cause the devil of a lot of trouble if they do find us. We've got this world going now, and with clouds and water and vapor it will keep going, because we'll add to it synthetically and stop evaporation. It is our heritage and we're going to keep it! One thing is pretty sure; those machines there will contain the cream of the warriors from our home world. If they can all be wiped out to a man there would remain only a few refugees and maybe scientists to master, if we decided to rule our own world again as well as this one."

"That's right," Iana nodded quickly, as he stood in thought. "Two worlds instead of one."

"And it can be done." Cal Anrax looked at her tensely. "It can be done. Why didn't I think of it sooner? That heterodyner of ours!

The power can be easily converted by altering the rate of vibration. I can change it from hetrodyne into pure force—*disintegrating force!*"

He swung, studying the power gauges. "Not much juice left in the power plant but it may be just enough. I'm going to risk it. No time to consult the others. This is up to you and me—so come on."

He went hurrying out and along to the projection-laboratory, began to calculate swiftly with the adding machines. Then he started up the power. Iana watched him make the power conversion, shift the position of the gimbaled projector by impulse vibrations.

Then he closed that deadly master switch.

The roar of the power was only brief—not more than thirty seconds. It had hardly died away before its effect became evident. In the relay screen linked to the distant telescope, the moon with its base of warrior machines suddenly cracked in four pieces! These in turn split with terrific violence, hurling their meteoric fragments to the four corners of the screen. The change in gravitational balance was evident a few seconds later on Vinra, too.

Cal Anrax and the girl clung to the switchboard as the laboratory swayed sickeningly up and down, as they heard outside the roar of disturbed air and pounding ocean, then the lesser sound of feet running down the outer passage.

Ralix and the other scientists burst into the room in anxious inquiry.

Slowly the disturbance abated. Cal stood upright again and turned to face them. Quietly he explained what had happened.

"I destroyed a moon, and them, before they could find and destroy us," he finished. "It would have been them or us for it. Now we have another task. While this world settles down to its rejuvenation we will travel back to the mother world and deal with those who remain. Our machines are well equipped with weapons now and the motors have been reset for just such a moment as this. Ralix, make the necessary arrangements. The sooner we depart, the better. . ."

The physicist nodded, motioned to the others and hurried out. . . .

BUT for all their high hopes they found upon returning to the home world that there was a barrier which even the science of Cal Anrax could not break down. Indeed

they suspected at first as they flew over the dying, almost water-denuded planet—a few hastily gouged canals visible to eke out the dwindling supply—as they beheld the shattered cities and deserted airways—that those in the space cruisers had been the last of the race, until in one isolated spot they saw a queer semitransparent hemisphere partly above ground. In fact the spot had at one time marked the entrance to extensive mineral mines.

Believing the composition was glass, and in no mood for trifling, Cal drove his leading space flyer straight at the dome—but instead of going through it he severely damaged the forward rocket tubes instead. The whole machine rebounded violently and landed on the rough ground below.

"What it it?" Iana demanded, as she and the others crowded at the ports and stared at the hemisphere intently.

"Force!" Cal answered laconically. "Something I hadn't reckoned with."

He peered through the dome intently.

"I think I can see men down there," he murmured. "But I can't do anything about it. Take a look."

The others moved to his higher elevation at the forward port and looked long and earnestly. There were men visible, apparently at a switchboard, or dotted about in various parts of what was a kind of control room.

"Vaxil must have taken fright after the seas and most of the air were snatched away," Cal said. "We've seen the hasty canals he's had made—but they didn't do him much good apparently. Then he must have used this idea to protect himself and his surviving cronies from further wrath to come. A force shield isn't a vast scientific problem, anyway, but it is a vast one to break it down unless you know the exact electrical formula which makes it up."

"You mean that we can't get at them?" Iana asked, in obvious disappointment. "That we can't make them surrender this world?"

"Just that. A journey in vain. Obviously Vaxil and his men have closed themselves in to be sure of safety."

Cal Anrax paused, then smiled as though a deeply significant thought had crossed his mind.

"By doing this they may have saved us the trouble of having to deal with them," he added. "Scientific law. We can only tell

when we make a return visit. For the moment we can do nothing but return to Vinra."

He was the leader and the decision was made, so the others passed no comment. He closed the switches and, due to the faulty rocket control forward, the machine rose in jerks to the limits of the thin atmosphere, began a spasmodic climb into the void.

"Trouble in those forward tubes," Cal said with a worried frown. "The compression is faulty."

"I'll take a look at it," Iana volunteered, and opened the main firing door.

Hardly had she done it before a terrific explosion, the release of superheated gases, belched forth. She never even knew what happened.

The whole universe went out in blinding sparks and a welter of gradually subsiding pain. . . .

CHAPTER VII

Trip Through Space

BY SLOW DEGREES Grant Mayson returned to consciousness. The details of the Council Room drifted in upon him, and with it the realization that the others had recovered, too, and that the girl Iana was standing a little apart, smiling at them.

"You believe now?" Her voice was quiet, but anxious. "You have seen what happened. I died in the explosion on that space cruiser. I remained a mind without a body, unconscious in the infinite, until the law of chance and your electrical apparatus brought me accidentally back into being. The millionth chance. Now you know—know many things, indeed. You men of science have wondered why Mars, my home world, is arid and has canals, why Vinra, or Venus, has dense clouds and yet no moon. The answer lies in the story I have told you by telepathy—a story which was enacted millions of years ago."

"Yes, we believe," Stephen Balmore said, in an awed voice. "It was the most wonderful thing I have experienced—a telepathic trip into the dim past, the study of a science so mighty that it staggers the imagination. You other gentlemen are satisfied, I take it?"

Grant and the remaining four men nodded

promptly, then Grant added:

"I would suggest that one of us records the full story for the sound tape immediately so that these other members of the Council may know the full details. . . For the moment, Iana, what are your intentions?"

"I want to go to Venus," she said seriously. "The people on that world are my own, my race. You have not the telescopes to probe through those clouds, and my knowledge is not great enough to show you how to make one. But I can show you how to build a space flyer."

"And would that be something!" Grant exclaimed.

"What do you think, sir?" he asked of Balmore. "Is Miss Iana free to act as she chooses, and am I still in favor?"

The head scientist smiled, "I think that we all realize that we are in the presence of a Martian scientist from a past time. We six are convinced. The others will be when they know the story. Yes, Miss Iana, you are free—on your responsibility."

He paused, a troubled look on his face.

"A problem?" the girl asked quickly.

"Yes, you might call it that. You are of Mars—and later of Venus—that we know. Yet you look exactly like any clever, educated woman of our own world here. In view of the general belief of science—on this planet anyway—that life on another world cannot be even remotely similar to ours, it seems odd that you should resemble us so closely."

"Yes, perhaps it does seem odd," the girl admitted, reflecting. "I can only assume that bipeds evolve fairly similarly on worlds of one particular system. An inhabitant of Sirius' system might be really different."

"Evolution has been more than kind to you, anyway," Grant murmured, studying her.

For a second she seemed to grasp the meaning behind his words, interpreted the look in his eyes. Then with a little smile she turned back to Stephen Balmore.

"Do you think, doctor, that the Government of this country would grant me the facilities to build a space machine?"

"I don't see why not. Apart from the story which will be specially recorded for the President, we are a scientific race, though of course we are amateurs compared to you. But we believe in scientific progress, and for that reason I think a chance to visit Venus, and maybe other planets, will be too

tempting to miss. It would be a large feather in America's cap, too!"

"I suppose that is saying you have enough science to carry it out," Iana smiled. "Anyhow, I hope you will use your influence. In the meantime, until I get definite news, I'll stay in my same room and work out the exact details for a space machine, ready for your engineers. For my information I want only one repayment—to join my race on Vinra, a race which must have grown to vast size from the original twenty. Some of them would have got back to the planet after that explosion, I'm sure. In fact I believe it only involved me."

"I'll do all I can," Balmore promised. "And you, Grant, had better come with me and explain as well. You've shown a grasp of science rather unique in connection with this problem."

BALMORE'S guess was right. The President not only agreed to the construction of a space machine, but was eager to see the project a success. Easily he swayed Congress to his own way of thinking and, following his lead, the public made the girl a heroine of science to the accompaniment of fetes, charity bazaars, and theater appearances.

There was no more struggle necessary in order to establish her. She had arrived, was proclaimed a genius, placed in the care of the Scientific Association, and then given *carte blanche* to exercise her skill for the general advancement of the profession. . . . And she did.

Under her personal supervision a spaceship began to take shape in Pittsburgh, Grant handling the business end under orders from Balmore.

Between times, with the easy generosity of great knowledge, the girl handed over to the State scientific secrets which to her were trifling, but which to America—and the world in general if America chose to be generous—meant vast improvement in everyday life. Special drugs for illnesses, new uses for radiant energy, weapons of defense. They all had their origin in her brilliant, fertile mind.

And the space cruiser grew, made to house eight people—herself, Grant Mayson, Stephen Balmore, and the others who had submitted to her telepathic effort. To them, willing in the first place to believe, she had handed the supreme reward, the realization

of any true scientist's dream—travel to another world.

The machine was finished early in the following year. Departure was in two days. Their particular work completed, Grant Mayson returned with the girl to the apartment in New York given to her by a grateful Government, but unlike other occasions Grant delayed leaving her. There was not another day's work ahead to impel him home to rest. He felt he had the chance to talk to her at last, away from other people and distractions.

"Iana," he said quietly. "I've come to know you pretty well in these last months. For all your knowledge, it hasn't made you cold and impersonal. You're warm—decent—good natured, like a million other girls who haven't got a shred of your ability."

"Well, thanks, Grant," she laughed, handing him a drink from the side table but declining one herself. "For a scientist as good as you are that's quite a speech!"

"I—I want to ask you something," Grant hesitated and looked at her over his glass. "Do you think—? Iana, I'm in love with you!" he finished rather desperately. "I have been ever since that day I found you in the laboratory. I'm—I'm not a demonstrative sort of chap, you know. Scientists rarely are. But with you—well, now you know."

The girl's face became serious as she studied his lean, earnest features. Tall, untidy as usual, he stood watching her.

"I respect that love," she said at length. "I really do, Grant. But there is a barrier between us. The barrier of different worlds. We're as apart as the ends of the Universe."

"I can't believe that, Iana. I—"

"But it's true!" Her simple insistence quietened him. "I have loved only one man with all my heart, longed for the day when we could be married. That man, as you will have guessed, was Cal Anrax, the scientific wizard."

"But that happened millions of years ago! You can't love him now!"

"To me it was but yesterday. That is one reason why I want to go to Venus, to see what his genius made of the race, to see the monuments he left behind. I might even find a man of my own world who is a descendant of Cal. Then—then I believe I could be happy."

Grant sighed and put down his empty glass.

"I'm jealous of that fellow," he confessed.

"He was a genius, I admit, but he's only a memory. It makes me feel as though that memory comes between you and me. And it's tough—especially loving you as much as I do."

Iana was silent, reflecting. Then she laid a hand on his arm.

"It is too soon to deal with this problem," she said gently. "I must see Vinra first. Please leave it at that—for my sake."

Grant looked at her, at her lovely face so close to his own. A struggle mirrored on his gaunt features and passed.

"Very well, Iana. For your sake."

NEW YORKERS in particular and the world in general gave the space flyer a terrific send-off. The journey began at ten in the morning, and the departure was traced by television transmitters, newsreel cameras, reporters, and every other conceivable means of transferring on-the-spot news to those who were not present.

Then, to the six in the control room—except to Iana who was accustomed to space travel—the wonder of the journey was the prime factor. Balmore, scientist ever, spent hours checking notes first hand on information he had formerly gathered through telescopes. The other experts each absorbed the grandeur in his own way.

Grant felt that he ought to do the same, yet for a reason which puzzled him the journey was not a thrill. He was conscious, somehow, of the rather ridiculous feeling that he had done it before somewhere. Perhaps through the telepathic dream of Iana. But then, so had the other scientists, and yet they were fascinated now.

Finally he settled down to a kind of routine interest in events, watching Earth shrink and Venus expand in all her argent, cloud-girt splendor. The girl herself handled the controlling of the machine, resting at given intervals and using the robot pilot to take over.

So, finally, the gulf was covered and they nosed at last into the density surrounding the planet. Anxiety and earnest watchfulness settled on the party as the girl eased the machine down through the impenetrable vapors. Upon her features was an expression of worried interest, the look of a person expecting a dream to come true.

The air screeched outside the thick hull and the clouds seemed to go down for miles. At last they burst below them, to find them-

selves no more than a thousand feet above ground. Instantly Iana leveled the machine out, looked below in puzzled wonder.

There was no sign of civilization, or anything remotely like it. Only jungle—vast, crawling jungle—a smothering, steamy immensity of trees, vines, dense verdure, impenetrable beyond belief.

"I don't understand," Iana whispered, flying the machine on in a straight line. "There must be some sign!"

So she declared over and over again, but her belief was not realized. They completed a circuit of the planet from east to west, and then from north to south, without finding anything but vegetation or deep azure sea.

Or, at least, *almost* without finding anything.

They came more by accident than anything else upon five eroded stone columns in one clear patch of jungle, and here Iana decided to bring the machine down.

Through the windows they could see they were on what had once been a terrace, but all formation of it beyond crumbled tiers and cracked colonnades had vanished before the snaking, eroding plant life.

"Well, Iana?" Stephen Balmore asked at last, disappointed.

"I don't know," she muttered, getting up and rubbing her head in a puzzled manner. "Not a trace nor sign of my race, and I just can't imagine why not. I expected a completely civilized world, and instead we find this!"

"We'd better go out and see what there is," Grant suggested. "Come on."

CHAPTER VIII

Dead Worlds

CHANGING into tropical attire, they armed themselves with protonic guns and provisions, then stepped out through the airlock into the jungle. Silence, crushing heat, eternal vegetation which seemed to grow and die even as they moved. There was nothing else. No sign of anything that lived or breathed.

For over two hours they searched assiduously amidst the ruins of the once beautiful, gigantic structure without finding a single sign, inscription, or clue to help them.

[Turn to page 32]

Hal Sacrificed His Chance To Win, But Then...

HAL FOSS, EX-FIGHTER PILOT, HAS A FULL LAP LEAD IN THE FIRST POSTWAR RUNNING OF THE FAMOUS 300-MILE METROPOLIS HANDICAP

FOSS IS A CINCH IF NOTHING HAPPENS!



WISTER, YOU'RE JUST PLAIN LUCKY!

YES, BUT THERE GOES THE RACE FOR ME

TOUGH BREAK FOR BOTH OF US, BOB

SIS, MEET HAL FOSS. HE LOST THE RACE, RISKING HIS LIFE TO SAVE MINE



AFTER THE RACE

CONGRATULATIONS, TOM. I COULDN'T LOSE TO A BETTER MAN

I'M THROUGH WITH MY RAZOR, HAL. YOU'RE NEXT

SAY, MY WHISKERS CAME OFF LIKE MAGIC. THAT BLADE'S PLENTY KEEN!

I ALWAYS USE THIN GILLETTES. THEY MAKE SHAVING A CINCH

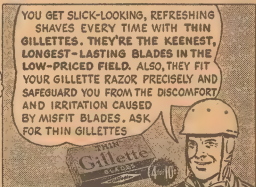


I NEED A PARTNER AND DAD WILL PUT UP THE CAPITAL

A TURBO-JET AUTO ENGINE? WOW! COUNT ME IN!

M-M-M. NOW I'LL SEE HIM OFTEN

YOU GET SLICK-LOOKING, REFRESHING SHAVES EVERY TIME WITH THIN GILLETTES. THEY'RE THE KEENEST, LONGEST-LASTING BLADES IN THE LOW-PRICED FIELD. ALSO, THEY FIT YOUR GILLETTE RAZOR PRECISELY AND SAFEGUARD YOU FROM THE DISCOMFORT AND IRRITATION CAUSED BY MISFIT BLADES. ASK FOR THIN GILLETES



At last Iana gave a despondent sigh and sat down on an eroded column.

"Sheer waste of time!" she confessed. "My race has utterly vanished. . . ."

"Is it possible that they went underground?" Grant Mayson reflected, frowning. "Perhaps the vegetation proved too much for them and so they went below?"

The girl gave him a quick look, then the hope born in her eyes faded.

"It would have taken more than vegetation to defeat Cal Anrax," she said seriously. "There must be some other explanation. Perhaps we have the wrong place."

She got to her feet suddenly, struck by a thought.

"Of course!" she cried. "They probably returned to the home world! Cal said we would go back, just before I was killed. Perhaps he did that. Maybe they found a way through the force globe Vaxil and his scientists created."

"We can but look," Grant acknowledged. "You agree, sir?"

"By all means," Balmore nodded. "Mars is it!"

Happier at the thought that she had perhaps found a solution, Iana led the way back to the ship. Within ten minutes they were hurtling upwards again over the jungle, through the clouds, and out once more into the depths of space.

Most silent of all as the journey got under way was Grant. He sat in the small chair by the forward port, a look of profound preoccupation on his features.

"What is it, Grant?" the girl asked him presently. "Something seems to be worrying you?"

"Hardly a worry—a puzzle," he said, glancing up at her. "While I was on Venus, on that broken down terrace, I felt that I knew exactly where your race went, and yet I couldn't quite place it. Is it possible that there were mental presences there affecting my mind? Trying to tell me something?"

The girl reflected.

"If that were so, Grant, why didn't all of us sense it? Myself especially? I certainly didn't notice anything."

Grant got to his feet and sighed.

"Something queer about all this." He rubbed his jaw pensively. "I feel like a man grasping at shadows, and yet who really knows the answer. Like a man who has had amnesia and who finds memory coming

back to him at the sight of familiar signs and places."

The group in the control room was silent for a moment, puzzled. Then an extraordinary expression passed over Iana's face. She seemed to come to the very verge of saying something, but it died again into moody speculation, even unbelief.

"I suppose that space travel affects everybody in a different way," Balmore said, fishing for solutions. "It must affect the brain strangely. That's all that's the matter with you, Grant."

"I guess so." Mayson nodded and smiled. "Forget it! I'd better nail myself down henceforth to helping plot the course."

And he did, tirelessly, but Iana noticed that there were times when his eyes were looking at the cosmicharts unseeingly, when his thoughts were obviously millions of miles away. . . .

Mars, deserted, red, sprawling with its rusty red deserts, loomed up as a landscape after some hundred and thirty hours of steady travel.

It was late in the Martian afternoon when they came within a thousand feet of the surface, the pale sun hanging out of the colorless blue sky.

"If ever a world died, this one did," Iana murmured sadly, piloting the machine onwards steadily across the waste. "Can you picture it as a world of oceans, landscape, mountains, soft winds and warm sunshine? Wiped out, because Vaxil wanted it all for himself!"

"Do you blame Cal Anrax for what he did?" Grant asked, his gaze on the endless waste of dead sea bottom below.

"I never did and never shall. Cal did right. He knew all our own people had died, that only Vaxil and his Easterners were in possession of the planet. It was just retribution. But it looks as though my guess was wrong." The girl sighed. "None of my people came here from Vinra, obviously—unless they have domiciled underground."

SHE flew the machine steadily onwards for over an hour, her eyes fixed on the unvarying sameness of the landscape. At last she gave a little cry and pointed ahead.

"There! See that? Like glass?"

Grant, Balmore, and the scientists peered ahead at a shining half moon projecting from the red sand.

"That's the force shield," the girl ex-

plained excitedly. "The one we found."

"Still there, after all these millions of years?" Balmore asked incredulously. "How can that be?"

"Why not? The generating force would be derived from the sun, and an energy under certain conditions can remain fixed for millenia. Yes, I'm sure that's it."

Clearly the girl was too eager with discovery to bother deeply about the scientific issues. She maneuvered the ship downwards in a sweeping curve and they came to rest not a quarter of a mile from the dome.

To clamber outside into the thin, cool air, stumble in the loose sand and light gravity towards it, was but the work of another ten minutes. Then they stood in silence peering through what was apparently clear glass—a fact disproved when Balmore touched it curiously then jerked his hand back with numbed fingertips.

"Force is right!" he breathed. "And look at those men down there! Are those your people, Iana?" he asked wonderingly.

A fixed expression had come to the girl's face. She leaned as near the dome as she dared, staring down with the others into some kind of control room. Below was a group of men, oddly attired, standing or sitting before the switchboards of machines. With the passing moments they showed not the least trace of motion. They might have been carved in stone.

"Well?" Grant asked finally. "What goes on?"

"Why is it all such a problem?" the girl asked helplessly. "One of those men down there is Vaxil—the second from the left there. The others are his immediate henchmen, members of the very Council which sent Cal, and me, and the others away as Outcasts. Millions of years have passed, and yet these men still stand just as they were on the very day Cal and I looked through this dome together! Why? I just don't understand it!"

There was a long, perplexed silence in the Martian quietness. Then Grant drew a deep breath.

"I believe I understand," he said slowly. "Look, Iana, didn't Cal say that they had perhaps signed their own death warrants?"

"Why yes! He did say something like that."

"And he was right!" Grant looked around keenly at the interested faces. "These men sealed themselves up completely in a globe of force—maybe they did the same for their

whole underground setup with its people—to save themselves from further attack or disaster from possible repetition of sea and air snatching."

Grant drew a deep breath.

"Completely sealed themselves up, mind you!" he repeated. "Now, to refer back to one of our own oldest scientific laws on Earth, we remember *this*, and I'm quoting now from a statement once made by Sir James Jeans in his *Mysterious Universe*: 'To achieve thermo-dynamic equilibrium, in which no increase in disorganization can occur, in which entropy is constant and complete, we must isolate some region where no energy can either *enter* or *leave*! Under these isolated conditions the energy will be banded back from matter to barrier and back again, and the shuffling—the only possible limit of energy interchanges—is soon complete. . . .' That's the quotation, as well as I remember it."

The girl pondered.

"You mean they just shut themselves up in a living tomb?"

"I do, yes. Good scientists though they were, they were too anxious for their safety to consider the deeper issues. They sealed themselves inside a globe of energy and in a very short time the energy reached its maximum number of changes. Entropy was complete. They all became fixed as they were, incapable of movement, neither dead nor alive. They achieved a condition, unwittingly, which parts of the Universe have already achieved—complete thermodynamical equilibrium."

"That, of course, is more than possible," Balmore admitted, "though I am not at all sure how you arrived at the solution so easily."

"If we wish to awaken them, doesn't it suggest another scientific law?"

GRANT MAYSON repressed a shudder and slowly shook his head.

"We can never awaken them," he answered quietly. "All we can try to do is find a way through this energy barrier. Once we do that, and thereby produce new atomic energies in a state of perfect equilibrium, we start entropy going again also. Everything down here will pass away into dust and a new state will begin—the state we will have started. It will mean that we have introduced a random element. . . ."

He paused and turned.

"After all, Iana, it's up to you. This is your world, not ours."

She was silent, gazing down pensively into the depths.

"You've guessed right, Grant; I know you have," she said at last.

"To enter through this dome would do no good. Down here there must be a race transfixed by the law of absolute entropy, the race which followed Vaxil millions of years ago and which has been held in scientific thrall ever since.

"Let it stay that way—a kind of monument to scientific greed—and error! It would benefit none of us to look below. Everything would just disappear, and this world is dead anyway. Hollow caverns are of no use to anybody. I would not find my own people, the race left on Vinra, so of what use is it?"

She turned away despondently and Grant fancied he caught the glint of tears in her gray eyes. In three strides he caught up with her as they moved back towards the space cruiser.

"Your people went *somewhere*," he said seriously. "They would surely have left some kind of record. If we went back to Venus we might yet find some trace."

She gave him a long, steady look. "You really believe that?"

"I definitely do! In fact, I think that if we returned to the same spot on Venus I might be able to find the answer myself. I am sure I nearly did it last time, though I don't know why. This time might cinch it."

Her eyes took on that curious, wondering light he had seen once before in the space machine when he had told her of his strange mental recollections. She gave a quick nod.

"All right, we can but try it."

She hurried her pace toward the vessel in sudden eagerness.

CHAPTER IX

United at Last

SURE ENOUGH, once the return journey to Venus had been accomplished, and that solitary clearing with the broken colonnades had been found again, Grant felt once more the same curious sensation as before steal over him.

"Makes me feel rather like a water di-

viner." He was grinning, as the girl and the scientists watched him prowl about slowly. "I've got that 'I've been here before' feeling mighty strong, such as many of us experience sometimes. There ought to be something here which—"

He broke off, made a sudden dive forward across the terrace as his eye caught sight of a curious bronzed panel forming the front facing of one of the terrace tiers. He dropped on his knees, fingered it urgently, pressing on the ornamentations.

Abruptly, with a faint click, it shot to one side and left a dark, drafty aperture.

"But—but how did you *know*?" Balmore whispered, dumbfounded.

"I just did," Grant replied. "Come on."

He flashed his torch beam through the opening, pointed to ancient bronze steps leading downwards and in another moment he had scrambled into the opening and on to them.

He helped Iana through after him, and the scientists followed eagerly.

When they had all gained the steps they stood looking round a monstrous metal-lined inner cavern, all traces of decay and mildew kept at bay by the constitution of the metal.

Dimly, at the limit of the torch beam, a floor could be discerned.

"Some kind of vault," Iana said, her voice echoing. "And you found it, Grant! I just can't believe it."

He began to descend the steps slowly. When he reached the bottom he stopped abruptly and slowly rubbed his forehead.

"That weird feeling of having been here before," he whispered. "I never felt it so strongly. There's got to be a reason for it! Just a moment. Let me try something out to see if it explains it."

The other travelers waited in tense interest as he went forward, his torch beam flashing about the emptiness until it alighted on a massive metal table. On it were two bronze-like boxes with highly complicated combination locks.

He stood looking at them, his face drawn and pale with vast mental effort. Silently the others stole forward and watched him. There was not a sound save their tense breathing.

Then, as though he were alone, Grant reached forward rather nervously to the first box and began to move the combination dial with his fingers.

Left—right—left again. Until at length it

clicked under his fingers and the lid sprang open.

Within was metal foiling. He stood looking at it, apparently too dazed to seize hold of it. Iana and Balmore could see a mass of hieroglyphics—but to Iana they evidently meant something for she dashed forward and, whipping the foiling up, trained her torch on it.

"Grant!" She was suddenly breathless. "Can you—read this?"

He shook his head bemusedly.

"But I can!" she cried. "It's in my own language." She bent closer.

"It's a record of what happened!" she went on urgently, her eyes going down the closely written lines. "And Cal wrote it!" she finished, studying the signature.

"What does it say?" Balmore demanded, his eyes shining.

"There's a lot of it. . . . He describes several important inventions. . . . Yes, yes, here he pays a tribute to my memory! He is very unhappy without me, he says. But—here we are! He writes: 'To continue to live on this world of Vinra is impossible. Below, the material is too spongy to permit of building a complete city, and above we have produced a too fruitful landscape! The water and air stolen from our home world brought with it spores and seeds which have settled and grown. Here, with violent sunshine and heat for seven hundred twenty hours, changed conditions, and extreme humidity which prevents any cold during the night, amazing growth has taken place.

"For all our efforts we are powerless to prevent the slow strangulation of our cities by plant life. Departure is the only answer. I am writing this record prior to our evacuation and shall place it in a sealed vault which I know will be proof against devouring vegetation. A second box beside this one for the record will contain all the prints for the inventions I have named. Some day somebody may come here and make use of these ideas. We have decided to go to the third world. Young and deadly perhaps, but tractable and not consumed with avid life. I think we may master it—"

THE girl stopped, her eyes wide.

"Earth!" Stephen Balmore ejaculated. "The third world! They went to Earth at the finish!"

"The very world to which chance brought me!" Iana looked about her with shining

eyes. "Oh, now there is so much that I understand! So very much! You are of my race! I belong to you! Do you not realize that it explains away the mystery of how life began on your planet? Explains too why the other worlds are empty? Grant, do you begin to understand, too?"

"Yes," he said slowly, "I think I do. We have come to the end of the odyssey. The complication of space and time has unfolded to us in the strangest possible way. And yet—why not? Universes go in circles; microcosm and macrocosm are in circles; orbits are in circles; life itself, even history. Above all things I realize one amazing fact—I am Cal Anrax!"

"But that's impossible!" Balmore ejaculated.

"I tell you I must be, doctor!" There was sudden ringing authority in Grant's voice. "I dared to think of the possibility for the first time when I felt myself drawn irresistibly towards Lana, when I was so jealous of the long forgotten Cal Anrax because of his scientific knowledge. Then I remembered things. Of all people, I alone understood Iana and her efforts with a formula! No person without some inherited connection could have grasped it so readily—"

"And there were other things," Iana hurried on, catching Grant's arm. "The way you kept saying over and over to me that you felt as if space were familiar to you, that you were not making the journey for the first time. That was when I too first dared to hope that you might be an unthinkable, distant successor to my beloved Cal. But I had to be sure first."

"There can be no doubt of it now," Grant said quietly. "I finished the theory of thermodynamic equilibrium which Cal had in mind for Vaxil and his minions. Only a continuation of ideas through one individual mind could have prompted that. And, too, I knew, with everything in me, that somewhere—in a remote past—I had concealed records of scientific discoveries. Standing in that terrace outside memory came floating to me—the memory of a secret vault, a special slide—seen as though in a dream."

"And none but the mind of Cal could have understood the combination of the lock," the girl finished. "See this lock for yourself. It is in our own symbols, not Earthian. Yet you understand them, Grant! Oh, Grant, this is more wonderful than I ever dared hope! I lost my race, only to find it around

me on that wonderful world of Earth! I lost Cal, too, only to discover that he lives on, that his scientific spirit lives again through you. Never since my rebirth have I been so happy. You *are* Cal, yes, in a different fleshly form. And—and yet, not so very different, either. You remember I once told you how much you reminded me of him?"

"My science is not quite so good as his was," Grant was smiling now. "Maybe the skill became blunted by the interval of time. Maybe it was even lost altogether in the struggle to master the vagaries of Earth in the early days. Maybe—lots of things."

"Do you imply from all this that you are Cal—reincarnated?" Balmore asked slowly.

"Certainly I do. So excellent a scientist as you must admit that reincarnation is not only possible, but logical. It happened in Iana's case that an identical reincarnation took place because the self-same atomic configuration came into being twice over, by sheer chance.

"In my case a *majority* of atoms and electrons forming the original Cal regathered in the normal course of evolution over millions of years. I don't doubt that I have lived hundreds of lives in between, all in some form or other reminiscent of Cal.

"In some of those lives I was doubtless a scientist and in other perhaps not. But the entity of Cal persisted through all the phases because he, so far as we are concerned, was the original pattern. Now I am here again as Grant Mayson in Nineteen Sixty-Four, entirely unaware of my past existence on another world until I visited that world and the telepathic memories started by Iana awakened me to the truth."

"Correct," Iana said gently, clinging to his

arm. "So utterly, beautifully correct! I *know* it, as a woman, as one who loved Cal more than anything in life—and I don't need cold science to prove it."

"Fate" or coincidence has been unusually lavish," Stephen Balmore said reflectively.

ALTHOUGH Mayson answered Balmore, it was Iana on whom he kept his gaze.

"Perhaps," Grant said. "Or maybe there is a destiny that shapes things after all, that the deepest wishes of our heart do mature in the end, no matter how many cycles pass between. Time, after all, is only an arbitrary measurement which is made by mathematicians so as to enable them to decide what happens in space."

He broke off, smiling, and caught the girl to him.

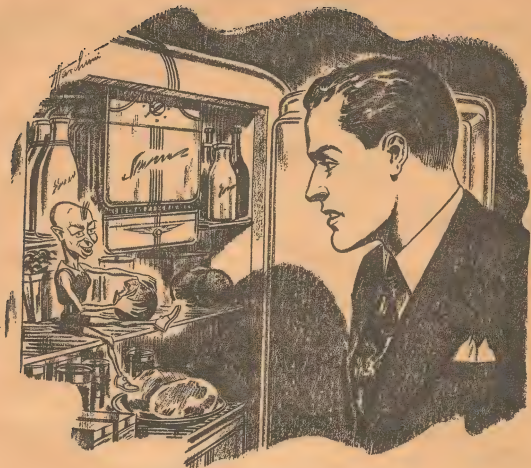
"Iana," he said gently, "I shall not be the ruler of the world when we get back to Earth—not even of half of it. We shall try and colonize this world and Mars, of course, and we will have a hand in it. But otherwise I'll just be Grant Mayson, scientist, maybe a bit better than most because of things I have learned and the secrets you have bestowed. But don't expect greatness. You'll be purely and simply Mrs. Mayson, wife of a young physicist."

"Legally, yes," she smiled. "In my imagination you will always be something infinitely greater than that. Not that I shall worry. I shall go back to Earth knowing that my own folk are around me, that they are of my flesh and blood after all, that the secrets I have handed on—and those contained in this other box here—are only treasures to which they are entitled. I am no longer a girl of Mars, or Venus, Grant—I'm a woman of Earth!"



THE VALLEY OF WALKING EARTH!

PHYSICIST BRUCE JACKLYN discovered it—the place where the animal, vegetable and mineral kingdoms all blended into one new breathing, thinking form of life. Then years later, four scientists came to Brazil to find radium—and hit upon the strange paradise! Their exciting adventures and the desperate perils they faced are told in *I AM EDEN*, next issue's great complete novel by Henry Kuttner. It's a science fiction masterpiece you will long remember—look forward to it!



"I may look like a human being, but I'm not," said the fachi

THE GOOD EGG

By **ROSS ROCKLYNNE**

Square Root, the little imp from outer space, gets the number of some racketeers, and does some fast figuring!

IF THE egg, little can be said, or much can be said, according to the way you look at it. For the egg either existed or did not exist.

Doc Ferris got a big kick out of the egg. He held it in his fat hand and his laughter came out richly.

"See?" he chortled. "Hold it this way and it sorta runs together at the curves, turn it sharp and you get a rectangular egg. See?

Then it disappears. Ho! Good trick, eh?"

Bernice was bored and showed no interest in her father's sleight-of-hand, which had figured in company entertainment as long as she could remember. In a way, that was all to the good, for she had successfully escaped the chilling experiences which many little children go through. Never before house guests had she been forced to recite such cruel nursery rhymes as the ones about

Jack and Jill, and Humpty Dumpty, and four-and-twenty blackbirds undergoing the Jap-like torture of being baked in a pie.

On the other hand, it was pretty much to the bad. Being part of her father's stage-setting for prestidigitation, her illusions crashed about her at an early age. Now that she was grown she didn't believe in anything.

Bernice yawned. She sent to her boy-friend a veiled command. Hugh Grant jumped up like a shot, scraping his chair noisily back from the dinner table. He had broad shoulders, a sandy complexion and a brush hair-cut. His gray eyes were mild. He had just been discharged from the Army and he was in civilian clothes.

His eyes were wide on the disappearing egg, but Bernice's signal had reacted automatically on his brain. Though he didn't want to leave just yet, he was pretty much Bernice's slave.

"Sorry, Pop," Bernice said, demurely sure of herself. "We'll be running."

A few moments later, she was snuggling up to Hugh in his car. It was some minutes before his mind could struggle back to its normally inquisitive channels.

"Pooh," she sniffed in answer to his question. "Don't worry about a silly old egg. Put your arm around me."

"It was amazing though," he murmured into her hair while the car somehow got along with the meager assistance of one hand and one eye.

"Nothing amazing about it, dearie. Dad's full of corny riddles like that. Kiss me."

"The car might run into something."

"Kiss me anyway," Bernice said.

On the way back that night, Bernice suddenly became concerned with Hugh's future.

"Hugh, you haven't found a job yet, have you?" she said. "Well, don't accept any offers. I think I'm going to be able to swing something for you through—a business friend of mine."

HUGH smiled. He wouldn't hold his breath waiting for Bernice to find him a job. She had a remarkable flair for—well, for exaggeration.

He dismissed her remark from his mind.

Doc Ferris was still up, reading a book on magic. He looked old and querulous and grumpy, but Hugh wanted to talk to him. Bernice kept on throwing out hints for Hugh to run along home, but Hugh ignored them. Finally Bernice yawned and announced sar-

castically that she was going to bed so her company could depart. She went up the stairs.

Hugh sat nervously on the edge of his chair and cleared his throat.

"About that egg, sir."

"Eh?" Ferris fumbled with his glasses.

"Oh, yes, the egg. What about the egg, young man?"

"That was a mighty good trick, sir."

"Just average, my boy. Just average."

"Could you do the same trick with the same egg, sir?"

Doc Ferris sat quite still for a moment. He was falling asleep. Then he jerked, his lower jaw clamping shut.

"Of course I could do the same trick with the same egg or any other egg. But I'm not going to. Er, good night, young man."

Hugh stood up. He felt desperate. He couldn't get the egg off his mind. And he knew the Ferrises had bacon and eggs every morning for breakfast—if they could find any bacon.

"You mean it's just like any other egg? Like the ones you'd keep in the refrigerator, for instance?"

Doc Ferris' head went drowsily up and down. Hugh said nothing more. He waited until the old man fell asleep. His heart was pounding as he tiptoed softly into the hall, then went swiftly toward the kitchen. He was about to commit a crime.

He was going to steal an egg.

In the kitchen, Hugh didn't find the remarkable egg, at first. He found two dozen eggs in cartons, none of which showed any remarkable characteristics. He turned them this way and that. He put them through their paces. He did everything but stand on his head to make the eggs turn rectangular and then disappear.

He was chagrined. Then he saw another egg, one he had failed to take from the refrigerator.

It was right in plain sight, near the frost-coated refrigerator coils. It was a beautiful egg. A perfect egg. Its shell was translucent. Around it danced weird little motes of light.

Hugh picked it up breathlessly and, notwithstanding its proximity to the freezing coils, it was warm to the touch. Slowly he revolved the egg on its long axis. The egg disappeared.

Hugh took the egg back to his apartment, never dreaming that some day it might hatch.

He didn't tell Doc Ferris he had taken the

egg. He didn't tell Doc Ferris that for an hour after he found the egg, he had completely forgotten himself and had sat there in the kitchen playing with the egg, watching it turn into a cornered object, then sort of sliding away out of sight into a strange compartment of space.

It would slide away, but Hugh could still feel it between his two fingers.

Then he would turn the egg and it would come back.

After he took the egg to his apartment and stowed it away in the refrigerator, he didn't see Bernice for two days. One morning, astoundingly, she called him up. Called up him, Hugh Grant! He felt a delicious tingle at the sound of her honeyed voice. He was in love with Bernice and he knew he always would be. He liked her impertinence—because he could never be impertinent. He liked her boldness and her sneers—because he was not bold and never sneered at anything. He liked her cynicism—because he was naive.

Yet if he had not been naive, he would have laughed off Doc Ferris' exhibition with the egg.

"Darling, we're going to the Club Spanish tonight!" Bernice Ferris said.

"Are we?" he said huskily.

"Oh, Hugh!" She was excited. "You remember I told you I might be able to open up a wonderful business opportunity for you? Well, Mr. Morrow is going to be at the Club Spanish tonight, and he wants to meet you. You can pick me up at nine."

He hung up, giddy with the crooning intoxication of her voice, but at the same time he was doing mental arithmetic which involved dollars and cents. His cash reserve couldn't compete with Bernice's lack of emotion where money was concerned.

When Bernice came tripping down the stairs, he made polite inquiries about her father. Her lively face froze over.

"Let's don't discuss unpleasant subjects, Hugh, please."

"Unpleasant?"

"You know what I mean," she said crossly. "Dad must be in his dotage. He's been worse these last couple of days. Yesterday I caught him on the phone ordering fifteen crates of Grade-A large-size eggs. Luckily I stopped him."

AT THIS, Hugh's heart sank. He felt his first twinge of conscience. Above Bernice's protests, he looked for Ferris and

found him in the kitchen.

Ferris tried to hide what he was doing. All he accomplished was to drop several eggs in squashy messes on the checkered floor as he was trying to get them out of sight into the refrigerator. Papa Ferris looked down at the yellow puddles, and sniffled. Two big tears ran down his face. He choked up.

"It's gone!" he sobbed. "It's gone!"

Hugh felt better about his theft of the remarkable egg by the time they reached the Club Spanish. Bernice saw to that. He emerged from the car with an accelerated blood-stream and mussed-up hair. He had told Bernice he loved her, and she had told him she loved him too.

At the back of his head lurked a nagging distrust of her sudden ardor, but for his peace of mind he was willing to let it stand.

Later in the evening, Bernice jumped excitedly from her chair.

"Mr. Morrow! Mr. Morrow!"

A man was just coming into the night club. He smiled and made his way toward their table. Mr. Morrow was handsome, but not offensively so. He was a couple years older than Hugh, but the chief difference between him and Hugh was the difference between a polished and an unpolished shoe. Everything about Morrow was in place, and Hugh suspected that if there were a spot of lint on one cuff he would find its mate on the other cuff. Yet Morrow was virile, and Hugh decided to like him. He shook hands firmly.

After quite a bit of chit-chat, terminated by the arrival of Morrow's drink, Morrow lost his quick smile and fixed dark eyes on Hugh.

"I told Ber—that is, Miss Ferris, that I'd be here this evening and that I'd be glad to discuss a business proposition with you," Morrow said. "I understand you were with a cavalry outfit before your medical discharge?"

"Well, yes. I saw some action in the Libyan desert and, later on, I fought in Italy."

"Of course. The important thing is that you understand horse equipment. Saddles and such. Mr. Grant, I'm a business man. I own a small, fairly profitable saddle and harness manufacturing establishment. Or rather, it was profitable until I found myself without essential materials. I didn't have a Government contract, and hence could get no priority. Now I've been left high and dry. That's where you can help me. And in exchange, I offer you a partnership."

"Wait a minute. You're going too fast.

How can I help you?"

"First, I need an associate who understands horses and horse equipment. Second, you're a discharged veteran and, as such, can go before a War Priority Board and secure a priority for the four tons of cured leather I need to keep me in business. You understand now?"

Hugh was not normally suspicious, but he felt doubtful. "That doesn't sound legal, somehow."

Morrow stood up, his eyes genial.

"Mr. Grant, I like a forthright person. I want you to think it over, though. As for the legality of the question, let the WPB decide that. You're setting yourself up in business as my partner. As a returned veteran, you have a legal right to a priority on essential materials. However, I'll be here most of the evening, and if you agree you can look me up."

He left, crossed the ballroom and sat down at a table with a couple of men. Hugh frowned. Somehow he didn't like the looks of those men.

Before the evening was over, however, Bernice had talked him into making an appointment with Morrow the next day, when temporary partnership papers would be drawn up. Before she and Hugh could marry, she pointed out, they had to have a recognizable income. She didn't, somehow, come right out and say they would be married. Oh, no. But the inference was certainly there, and Hugh was walking on a cloud.

Meantime, back in Hugh's apartment, there was an egg. It was right up against the freezing coils of the refrigerator, but, since there was a current of sub-spatial energy flowing into the egg from another place, the egg was fairly warm.

The outward manifestations of the sub-spatial energy were the motes of light dancing around the egg's translucent shell.

The creature inside the egg was thinking. One thing he thought about a lot was why he hadn't been born yet. He had an idea why. Once before—so his inherited ancestral memories told him—one of the *fachi*, who live in a dimension alien from that of Earth, of course, had accidentally laid an egg in a sub-space ether-warp. That *fachi* had been purged for his thoughtlessness.

It didn't matter that the eggs of the "chicken," a fowl peculiar to the Earth-dimension, sometimes showed through the ether-warp and might be mistaken for a heap

of *fachi* eggs. The point was that the purged *fachi* should have inspected the heap of "chicken" eggs before he made the serious mistake of depositing his own egg thereon.

A long time later, the *fachi* who had hatched from the mis-laid egg showed up, explaining he had just been born.

TO THE *fachi* who listened, he evolved the highly plausible theory that in the Earth-dimension it took a longer time to be born than in the place. In the place, therefore, the time-stream of childhood flowed swiftly while that of older age slowed down. It was the opposite in the Earth-dimension, where the years of youth seemed to last forever, and the years of age passed lamentably fast.

Notwithstanding his fine contribution to scientific learning, the just-born *fachi* was killed too. He had, naturally, been contaminated by human thoughts.

In view of all this, the *fachi* in the egg knew that when he was born, he could never go back to the place.

While he lay thinking these thoughts, Hugh Grant entered the apartment, whistling gaily. The egg heard him and felt a convulsion of dread. He steeled himself for the ordeal, but in the meantime he tried to grab hold of Hugh's mind and beg him to desist. But, not having been born yet, the *fachi* could read Hugh's mind but could not communicate with him.

The refrigerator door was flung open. Hugh picked up the egg, and the egg was—twisted.

It was no ordinary twist. It was a wrench, without knowledge of the multi-dimensions. The egg would have screamed with pain if he could, as for minute after minute he was tortured, parts of him sticking into one dimension and parts into another. But finally Hugh put the egg back in the refrigerator and went to bed, still whistling.

Hugh forgot about the egg during the next few days. One day he came home and, when he didn't come to the kitchen, but went straight to the telephone, the egg experienced relief. While Hugh was dialing the number, the egg, who felt nothing but friendliness toward Hugh in spite of the way Hugh had treated him, sent out some thought-tentacles and snooped through Hugh's mind. The egg was dismayed by what he saw.

"Sucker!" the egg marveled.

Hugh was talking to Bernice now. "Yes, darling, it's all set. Morrow has the priority slip. He's getting the order out right now.

Well, the usual red tape, but not too much. They routed me to the Separation Center first off, and the GI counsellor thought it was a good opportunity. He did put in a call to Morrow—a formality. After that it was duck soup."

There was some more conversation. Hugh asked Bernice when he could see her. Her answer obviously disappointed Hugh. Crestfallen, he said he'd call her next week.

"Sucker!" the egg thought.

Three days later, the egg hatched.

At that particular moment, when the *fuchi* was undergoing the exhausting process of punching his way out of the stubborn egg-shell, Hugh Grant was drawing his convertible to a stop at the curb in front of a dilapidated building. Its ground-floor store-front sported a sign which read:

MORROW HARNESS & SADDLE CO.

Hugh was discouraged. Added to the fact that Bernice had been unable to see him since that night at the Club Spanish, was the equally disconcerting note in Morrow's voice when he had called Hugh a scant hour ago. Morrow had told Hugh he had bad news for him.

Hugh had gone to see him. Morrow had risen from a scarred, cheap desk and had shaken Hugh's hand. He appeared glum, uncertain.

"I guess our little business venture has fallen through, Mr. Grant," he said reluctantly. "So it's just as well I had you sign only temporary partnership papers."

"What do you mean?" Hugh snapped. "Didn't the order go through?"

"Like clockwork. Here, I'll show you." Morrow took Hugh through a door and into a warehouse behind the office where a strong smell of tanned leather prevailed. Stacked around the walls were piles and piles of cured cowhide.

"We've got the leather, Grant," Morrow said. "Four tons of it. See?"

"Then what's the trouble?"

Morrow didn't look virile any more. He seemed to be harried, worried, nervous.

"I've been playing the market, Grant, and I was unfortunate enough to pick the wrong stocks," he said simply. "I'm busted. I have to liquidate the business in order to break even."

Hugh was nettled.

"It seems to me you're a flop as a busi-

ness man."

Morrow's dark eyes flashed. He drew himself up.

"You don't have to get huffy about it," he answered coldly. "I'm putting it to you straight. After all, you ought to be mighty glad the partnership papers didn't have time to go through. Then you'd be equally responsible."

FOR a moment the two men glared at each other. Hugh knew he was being unreasonable. The real reason for his irritation was Bernice's refusal to see him, his inability to understand why.

"Okay, Morrow," he said shortly. "We'll let it go at that. Better luck next time."

Without shaking hands, he went back into the office. Just as he started through the door, the two unsavory-looking men who had been with Morrow at the Club Spanish came in. They had the same sort of baby-direct stare that Hugh had seen in movie-gangsters. Hugh brushed past them uncivilly, got into his car and drove away.

He spent the rest of the day tracking down jobs. One out of every seven returned service men, he knew, were taking advantage of the GI Bill of Rights to set themselves up in business. But not Hugh Grant. He had decided he didn't have a good business head anyway.

Why couldn't he get a job in some research laboratory? He was interested in science. That was one reason why he had been so infernally curious about Doc Ferris' magic egg. Come to think of it, why didn't he do some serious research into the whys and wherefores of the egg's remarkable behavior? Why, it might even lead to something big!

Hugh no sooner got to his apartment and opened the refrigerator door than his ruddy face blanched. He uttered a strangled sound and fell back against the kitchen table.

Sitting on the edge of a top refrigerator grated shelf was a little imp. The imp was busily tearing into an orange, meanwhile looking at Hugh with bright scarlet eyes.

Then words seemed to form in Hugh's mind, just as if they were spoken words.

"Everything's okay," said the *fuchi*, who had half of his bald head buried in the orange. "Relax. I just hatched from that egg you and Doc Ferris got such a kick out of—and I didn't. You remember? Doc Ferris—the father of the gal who twists you around her little finger."

Hugh made another sound, leaned against the table.

"Nope, Hugh, I'm not a human being," the *fachi* continued. "I may look like one, sort of a toy-size human, but I'm not one. I'm a *fachi*. *Fachi* live in a—well, in a *place*. If you horve the rapsol on miscars, you've got a pretty good idea where the *place* is. But if you can't walk a straight piddler from here to the bollin without govin doot, then it's no use. I'll have to fall back on some corny explanation like Flatland or the fourth dimension."

A whole minute passed while Hugh's blue eyes rested on the *fachi*'s scarlet ones—scarlet eyes just a shade lighter than his cherry-wood colored skin.

"Why not put down the orange?" Hugh said faintly. "Half of what you're saying doesn't make sense."

"Put down the orange? Good Heavens, man, I was just born. I'm starving! Anyway, the orange doesn't interfere with my telepathic powers, does it?"

"I can't walk a straight piddler from here to the bollin without govin doot?" Hugh said, still clutching the table.

"That's what it looks like," the *fachi* said glumly, at last removing the orange.

He wiped his tiny hands on his tiny thighs, and looked much discouraged. He stood up.

"I'm plus, now, see?" he said, turned and his outlines blurred. "See? I just walked a straight piddler." He turned some more, became vaguer of outline. "Just now I reached the bollin." He disappeared. "And I *didn't* govin doot! So I'm minus."

He came back.

"See?"

Hugh sat down, mainly because he had to. He spoke in a faint voice. "Okay, Square Root."

"What? What did you call me?"

"Square Root. The square root of minus one is plus or minus one. You're the Plus Or Minus One—hence Square Root."

The *fachi* mulled that over. "Okay. You can call me Square Root."

"That's fine, Square Root," Hugh said grimly, and he stood up. There was dark color under his skin. "Now. What was that you said about Bernice Ferris?"

Square Root blanched a little.

"Huh? Why—why I just said she was—uh—playing you for a sucker. The reason I—"

Hugh lunged forward and grabbed Square

Root under the armpits, using a thumb and index finger.

"Now!" he roared. "What was that?"

"Don't!" The manikin's voice was a tiny lost scream of terror. He began to sob and blubber. He began to kick and wave his arms and scream and shed tears. "*Don't!* Don't twist me! Don't twist me! You miss the bollin every time. It hurts, Hugh. Oh, you don't know how it hurts!"

"You slandered her," Hugh thundered. "Somebody you don't even know. Go on back to your own *place*, wherever that is. Get out of my refrigerator!"

HE PUT Square Root down. Square Root continued to weep, in growing horror.

"I can't go back," he whispered. "You wouldn't be cruel enough to send me back. Hugh, why can't I stay here? What have I ever done except to get mis-laid?" Blubberingly, he explained to Hugh why they'd kill him if he ever came back. "I'll do anything for you, Hugh, if you let me stay. I'll even—I'll even *prove* what I said about that slick-chick of yours."

"Slick-chick?" Hugh snarled.

"Slick-chick!" the *fachi* shouted excitedly. "A drum-bum. A skirt-flirt. A kiss-miss. A pass-lass. Hugh, when are you going to realize that Bernice shoved you into Morrow's scheme just because she's in love with Morrow?"

Hugh closed his eyes. His mind swam sickeningly. With smashing impact, two and two began to add themselves. So that was why Bernice hadn't been anxious to see him!

The *fachi* sat down again, impertinently swinging his legs which looked so much like bumpy cherry-tree twigs.

"Y'see, Hugh, as an egg I used to relieve my boredom by reading your mind. When Doc Ferris had me, I'd read Bernice's mind. That Bernice! You should have whaled the living daylight out of her. Then she would have some respect for you. As it is, she just hasn't any respect for anybody, except herself and Morrow, maybe."

"I'm going to wring her neck!" Hugh said.

"Morrow's some kind of racketeer," the *fachi* went on. "I don't know what his game is exactly, but it isn't on the level. He's pretty smart. He makes the acquaintance of cute kids like Bernice, works the old charm, then asks 'em if they've got any ex-GI boy-friends. Nine times out of ten they have. After that, it's a cinch."

"But what does he get out of it?"

"A-one priority materials."

"Then what?"

The *fachi* frowned. "I don't know."

"I know!" Hugh said savagely. He whirled.

"Okay, Square Root, thanks. I'll be back!"

"Hey!" The *fachi* sailed in a long, frantic arc from the refrigerator. He caught onto the edge of Hugh's coat pocket.

"Where are you going?"

Hugh was in a towering rage. He didn't answer. He left the apartment, and was hardly aware that Square Root levered himself pantingly into Hugh's side coat-pocket. He got into his car and took off with a rush and roar that broke the speed limit.

Patriotism! It was to laugh! While GI's like Hugh were fighting on battlefields and getting a bullet in the stomach, people like Morrow were thinking up rackets back home.

Hugh headed at furious speed for Bernice's home. Just as he turned into her street, her coupe came bumping out of the driveway, picked up speed, turned the corner in the other direction.

Hugh started as Square Root's thoughts came.

"Hah! She's probably going to meet Morrow, Hugh."

"Okay," Hugh said, grimly. "Then we'll kill two birds with one stone."

Bernice led him a troublesome trail, at first. But he finally surmised where she was bound. As the *fachi* had suggested, she was headed for Morrow's office on Corkin Boulevard.

Hugh parked his car around the corner, about a half block from an alley which he figured led to the back of Morrow's warehouse. He entered the alley, moving in shadow as much as he could. There was a big enclosed truck the size of a moving van backed up into the warehouse. Hugh moved along the side of the moving van, looking into the warehouse. Nobody was around. Hugh stepped into the warehouse. His jaw set.

The truck was half-loaded with leather. The piles of leather in the warehouse were lower. Some of it had already been trucked away to its destination.

"Careful!" Square Root warned him, nervously, as Hugh went padfooted to the office door at the far end of the warehouse and put his ear to the door. "This might be dangerous."

But Hugh heard Bernice's voice, very ob-

viously coming around a piece of over-chewed gum.

"I don't understand," she protested. "You can't leave town! Not after the way you talked about caring for me. Oh, can't we talk alone, without these men in here?"

Morrow sounded annoyed.

"Whatever is to be said can be said now. Did I make you any promises? No."

"You did!" she cried with sudden hysteria. She stamped her foot. "You did, you did, you did! You said we'd get married as soon as your business got on its feet. You can fool Hugh by that nonsense of how you're going to liquidate, but you can't fool me. You're a dirty, mean sneak of a man and I'm going to the police and snitch!"

SUDDENLY she yelped. There was a scuffle.

"Got her, boss," a deep throaty voice said. "It's disgusting. Can't trust no dame. We better knock her out, gag her and scam."

At that point, despite Square Root's protests, Hugh yanked on the door and plunged into the office.

There were three men in the office besides Morrow. They were in dirty, leather-smelling work-clothes. One was holding Bernice, his stained hand over her purpling face. She was kicking and gurgling.

"Let her go!" Hugh shouted.

Suddenly he suspected that his heroics were out of place. It was the way the men were looking at him. It was the way Morrow was looking at him, with annoyed frustration making dimples at the corners of his clamped lips.

"Grant," he said in tired tones. "You make it hard for me. You make it plenty hard. Why didn't you stay home?"

"Because I'm on to your game," Hugh snapped tensely. "You stand to grab about one hundred per cent profit on that four tons of leather, through the Black Market. That's right, isn't it?"

"Hey, that's good," Square Root said excitedly. "Listen. Here's the rest of it." His rapid thoughts came.

"And you work the same deal over and over again," Hugh said. "You set up four or five 'businesses,' get each business listed in the telephone book with the same address but a different name. It just happened to be the Morrow Saddle and Harness Company when I came along. This office has outlived its usefulness though, so you're moving to

another city."

The four men looked at each other.

"That's too bad," Morrow answered gently. "That's just too bad."

He gave a signal. Two of the men instantly jumped at Hugh. Hugh whirled and, using the sides of his hands, executed a blurred series of jiu-jitsu jabs.

He knocked the wind out of one man but another thug came up behind him and hit him on the back of the neck with a sandbag. Hugh fell. Through the roaring emptiness in his skull, he could hear Bernice's protests.

"You can't," she kept crying. "It isn't his fault. Please! Let him go and I'll talk to him. I'll make him promise never to say a word. I can wind him around my little finger."

Then his senses blanked out. . . .

Somebody was sitting on Hugh's forehead when he awoke. It was Square Root. Under Hugh was a vibration, the smooth jouncing rumble of truck wheels. To his nose came the suffocating odor of tanned leather.

Square Root's face was disconsolate. He leaned over and looked down into Hugh's immense right eye.

"You shouldn't have busted into Morrow's office like that, Hugh," Square Root complained. "They've got you and Bernice tied hand and foot with baling wire. As soon as the truck gets to the edge of town, they're going to dump you off into the river. You and Bernice know too much. They have to get rid of you."

Hugh was lying on a stack of smelly leather. Behind him he could hear Bernice.

"I want to die!" she whimpered.

"You will," Square Root said encouragingly.

Bernice screamed as she saw Square Root. Square Root took it upon himself to explain himself in tedious detail. Hugh cut him short.

"Don't just sit there!" he bawled. "Do something. Free us. Get a wire-cutter!"

Square Root paled. Suddenly he was blubbering with fright.

"No, Hugh," he pleaded. "Anything but that. Don't you see, if I get a wire-cutter, they'll see me."

Hugh glared.

"Do you want us to die? What's so hard about getting a wire-cutter?"

Horror was in the *fachi's* scarlet eyes.

"All right, Hugh," he groaned. "But if I don't come back, you'll know I'm dead."

Before Hugh's eyes, Square Root walked a straight piddler, reached the bollin, and didn't govin doot. Which is to say, he disappeared.

Square Root didn't come back, and didn't come back. Suddenly the truck hit a down-grade.

"The river's only two miles from here, Hugh," Bernice whispered. "What are we going to do?"

Hugh scowled at her. "Maybe you should have thought of that in the first place."

She wept.

"I thought it was all on the up-and-up. I didn't have any idea he was in the Black Market."

"I'll bet!" Hugh snapped, much discouraged. Knowing she was telling the truth, he relapsed into silence. Then he felt something crawling up his leg, slowly and with difficulty.

"Square Root!" Hugh cried.

The *fachi* reached Hugh's chest. He was covered with dried green blood. He was suffering. He had got into one devil of a fight with somebody.

"The *fachi* got me," his telepathed words came weakly. "I went back to the place for a wire-cutter. My brother *fachi* saw me and naturally tried to kill me. I had to kill some of them, using the wire-cutter." He held up a tiny tube with a lens in the end. "This will cut wire."

"Square Root, you're a good egg," Hugh said around the lump in his throat.

The *fachi* crawled to Hugh's ankles. There was a crackling, a burst of daggered brilliance. Hugh felt the wires around his ankles give way. He rolled over and let Square Root work on his wrists. As they came free, he felt the truck hit the bottom of the hill and then slow down as it took the curve to the river bridge.

Hugh came to his knees in the lurching van, then to his feet. His feet were numb lumps of bone and flesh. He fought to keep erect. He looked around for Square Root. The *fachi* was lying on the truck bed. He had fainted. The "wire-cutter" was still gripped tight in his tiny red hand.

Hugh scooped him up tenderly and wobbled back to where Bernice lay. He pried the wire-cutter from Square Root's fingers. He pressed a button on the instrument and stifled an exclamation when a shimmering, polka-dotted beam leapt out. If that could cut wire, it could burn human flesh, too. It

must be a disintegrator ray. Maybe he could get a patent on the gadget. If they got out of this alive.

He used the instrument to free Bernice, then thrust Square Root at her.

"Hold him," he commanded.

There was something in his voice so stern that she grew meek right away.

"Yes, Hugh."

She took Square Root gingerly.

Hugh's face was grim as he worked his way through the aisle formed by stacks of leather. At the front of the truck was a dirty window, through which he found himself looking into the driver's compartment.

There were three men in the cab. Morrow sat next to the window, face set and determined. Hugh scowled blackly, wrapped his handkerchief around his fist and jammed it through the window.

As the glass crashed, the heads of the three men jerked around.

"Grant!" Morrow yelled.

Hugh pointed the "wire-cutter" at the driver.

"Pull over to the side of the road!" he roared.

The driver was dumbfounded. He suddenly cramped the wheel, hard. Hugh reeled sharply to one side. He pressed the button on the tube. A crackling, radiant beam leaped out. Hugh never saw where it hit, but he was sure it struck the wheel, for the van was abruptly turning over and over and Hugh was turning with it.

Tons of cowhide promptly pinned him down, almost suffocating him. He gasped chokingly, fought his way free, and plunged straight toward a gaping diamond of light. The truck doors were warped off their hinges. Hugh burst through, found himself hip-deep in rank green weeds. The truck was lying at a crazy angle. It had trundled off into the ditch.

From the bank there was a scrambling sound. Hugh saw Morrow, struggling up the bank toward the road. Hugh raised the "wire-cutter" and fired. The beam didn't hit Morrow. But it disintegrated the shelving earth he was standing on. He yelled despairingly and came whirling down the slope of the ditch.

Hugh jumped on him, and Morrow turned into a keg of dynamiting arms and legs. Hugh, incredulously, found himself pinned underneath. He saw Morrow's savagely determined face against the sky and Morrow's

powerful face, come smashing down.

Hugh got his elbow in the way at the last second. His own fist went jabbing up. It hit Morrow's jaw. Morrow seemed to rise straight into the air for a foot or so. He looked surprised. Then he rolled off of Hugh, trembled with a strange shuddery motion and lay still.

Hugh now went into the truck and found Bernice. He advanced on her, his jaw out.

"Hugh!" she screamed.

But he grabbed her, laid her across his knee, and began to pound. After that, he threw her aside and, with great satisfaction, lighted a cigarette. He found Square Root and dropped him back in his own pocket. He walked around the truck and in the driving compartment were Morrow's two pals. They were hunched up, unconscious, with bad cuts on their heads. The wheel of the car was just a shapeless mass of melted metal.

Well, the three of them would soon be in the hands of the FBI. Hugh walked up the slope of the ditch to hail a passing car. . .

MANY, many hours later, Hugh escorted Bernice ahead of him through the door into her home. He shoved her toward the stairs. She was discouraged, thoroughly chastened, and she was crying. At the top of the stairs she turned.

"Call me soon, Hugh," she begged him.

Hugh glared at her and ignored her. He went through the house looking for Doc Ferris.

Square Root's gleeful thoughts came to Hugh. "You can twist her around your little finger now, Hugh," the imp said. "If you think she's worth it, that is."

Hugh sighed heavily.

"I don't know," he muttered. Still, he reflected, maybe she had received the treatment she needed.

Hugh found Doc Ferris in the kitchen. The kitchen was a mess. Squashed eggs were all over the place. Egg crates and paper egg cartons were scattered everywhere. In the midst of this havoc stood Doc Ferris, grinning triumphantly.

"I found it!" he cried. "And I've been looking for it so long! See? See? Hold it this way and it sorta runs together at the curves, gets rectangular—and then disappears! Ho! Good trick, eh?"

Square Root's tragic thoughts reached Hugh. "Hugh, this is terrible. One of the *fachi* has mis-laid another egg."

CALL HIM DEMON

By KEITH HAMMOND

Deep in his fourth dimensional lair crouches the hungry monster—while only a band of children guards helpless adult victims from his grim and insatiable exactions!

CHAPTER I

Wrong Uncle



A LONG time afterward she went back to Los Angeles and drove past Grandmother Keaton's house. It hadn't changed a great deal, really, but what had seemed an elegant mansion to her childish, 1920 eyes was now a big ramshackle frame structure, gray with scaling paint.

After twenty-five years the—insecurity—wasn't there any more, but there still persisted a dull, irrational, remembered uneasiness, an echo of the time Jane Larkin had spent in that house when she was nine, a thin, big-eyed girl with the Buster Brown bangs so fashionable then.

Looking back, she could remember too much and too little. A child's mind is curiously different from an adult's. When Jane went into the living room under the green glass chandelier, on that June day in 1920, she made a dutiful round of the family, kissing them all. Grandmother Keaton and chilly Aunt Bessie and the four uncles. She did not hesitate when she came to the new uncle—who was different.

The other kids watched her with impassive eyes. They knew. They saw she knew. But they said nothing just then. Jane realized she could not mention the trouble—either, until they brought it up. That was part of the silent etiquette of childhood. But the whole house was full of uneasiness. The adults merely sensed a trouble, something

vaguely wrong. The children, Jane saw, knew.

Afterward they gathered in the back yard, under the big date-palm. Jane ostentatiously fingered her new necklace and waited. She saw the looks the others exchanged—looks that said, "Do you think she really noticed?" And finally Beatrice, the oldest, suggested hide-and-seek.

"We ought to tell her, Bee," little Charles said.

Beatrice kept her eyes from Charles.

"Tell her what? You're crazy, Charles." Charles was insistent but vague.

"You know."

"Keep your old secret," Jane said. "I know what it is, anyhow. He's not my uncle."

"See?" Emily crowed. "She did too see it. I told you she'd notice."

"It's kind of funny," Jane said. She knew very well that the man in the living room wasn't her uncle and never had been, and he was pretending, quite hard—hard enough to convince the grown-ups—that he had always been here. With the clear, unprejudiced eye of immaturity, Jane could see that he wasn't an ordinary grown-up. He was sort of—empty.

"He just came," Emily said. "About three weeks ago."

"Three days," Charles corrected, trying to help, but his temporal sense wasn't dependent on the calendar. He measured time by the yardstick of events, and days weren't standard sized for him. They were longer when he was sick or when it rained, and far too short when he was riding the merry-go-round at Ocean Park or playing games in the back yard.

"It was three weeks," Beatrice said.

"Where'd he come from?" Jane asked.

A COMPLETE FANTASTIC NOVELET



Jane was aware of a great swaying of flowers, of cowed figures—and she was one of them—moving between giant blossoms toward the pale and helpless victim

THERE were secret glances exchanged. "I don't know," Beatrice said carefully.

"He came out of a big round hole that kept going around," Charles said. "It's like a Christmas tree through there, all fiery."

"Don't tell lies," Emily said. "Did you ever truly see that, Charles?"

"No. Only sort of."

"Don't they notice?" Jane meant the adults.

"No," Beatrice told her, and the children all looked toward the house and pondered the inscrutable ways of grown-ups. "They act like he's always been here. Even Granny. Aunt Bessie said he came before I did. Only I knew that wasn't right."

"Three weeks," Charles said, changing his mind.

"He's making them all feel sick," Emily said. "Aunt Bessie takes aspirins all the time."

Jane considered. On the face of it, the situation seemed a little silly. An uncle three weeks old? Perhaps the adults were merely pretending, as they sometimes did, with esoteric adult motives. But somehow that didn't seem quite the answer. Children are never deceived very long about such things.

Charles, now that the ice was broken and Jane no longer an outsider, burst suddenly into excited gabble.

"Tell her, Bee! The real secret—you know. Can I show her the Road of Yellow Bricks? Please, Bee? Huh?"

Then the silence again. Charles was talking too much. Jane knew the Road of Yellow Bricks, of course. It ran straight through Oz from the Deadly Desert to the Emerald City.

After a long time Emily nodded.

"We got to tell her, you know," she said. "Only she might get scared. It's so dark."

"You were scared," Bobby said. "You cried, the first time."

"I didn't. Anyhow it—it's only make believe."

"Oh, no!" Charles said. "I reached out and touched the crown last time."

"It isn't a crown," Emily said. "It's *him*. Ruggedo."

Jane thought of the uncle who wasn't a real uncle—who wasn't a real person. "Is he Ruggedo?" she asked.

The children understood.

"Oh, no," Charles said. "Ruggedo lives in the cellar. We give him meat. All red and

bluggy He likes it! Gobble, gobble!"

Beatrice looked at Jane. She nodded toward the clubhouse, which was a piano-box with a genuine secret lock. Then, somehow, quite deftly, she shifted the conversation onto another subject. A game of cow-boys-and-Indians started presently and Bobby, howling terribly, led the rout around the house.

The piano-box smelled pleasantly of acacia drifting through the cracks. Beatrice and Jane, huddled together in the warm dimness, heard diminishing Indian-cries in the distance. Beatrice looked curiously adult just now.

"I'm glad you came, Janie," she said. "The little kids don't understand at all. It's pretty awful."

"Who is he?"

Beatrice shivered. "I don't know. I think he lives in the cellar." She hesitated. "You have to get to him through the attic, though. I'd be awfully scared if the little kids weren't so—they don't seem to mind at all."

"But Bee! Who is he?"

Beatrice turned her head and looked at Jane, and it was quite evident then that she could not or would not say. There was a barrier. But because it was important, she tried. She mentioned the Wrong Uncle.

"I think Ruggedo's the same as him. I know he is, really. Charles and Bobby say so—and they know. They know better than I do. They're littler. . . . It's hard to explain, but—well, it's sort of like the Scoodlers. Remember?"

The Scoodlers. That unpleasant race that dwelt in a cavern on the road to Oz and had the convenient ability to detach their heads and hurl them at passersby. After a moment the parallel became evident. A Scoodler could have his head in one place and his body in another, but both parts would belong to the same Scoodler.

Of course the phantom uncle had a head and a body both. But Jane could understand vaguely the possibility of his double nature, one of him moving deceptively through the house, focus of a strange malaise, and the other nameless, formless, nesting in a cellar and waiting for red meat. . . .

"Charles knows more than any of us about it," Beatrice said. "He was the one who found out we'd have to feed R-Ruggedo. We tried different things, but it has to be raw meat. And if we stopped—something awful would happen. We kids found that out."

It was significant that Jane didn't ask how. Children take their equivalent of telepathy for granted.

"They don't know," Beatrice added. "We can't tell them."

"No," Jane said, and the two girls looked at one another, caught in the terrible, helpless problem of immaturity, the knowledge that the mores of the adult world are too complicated to understand, and that children must walk warily. Adults are always right. They are an alien race.

LUCKILY for the other children, they had come upon the Enemy in a body. One child alone might have had violent hysterics. But Charles, who made the first discoveries, was only six, still young enough so that the process of going insane in that particular way wasn't possible for him. A six-year-old is in a congenitally psychotic state; it is normal to him.

"And they've been sick ever since he came," Beatrice said.

Jane had already seen that. A wolf may don sheepskin and slide unobserved into a flock, but the sheep are apt to become nervous, though they can not discover the source of their discomfort.

It was a matter of mood. Even *he* showed the same mood—uneasiness, waiting, sensing that something was wrong and not knowing what—but with *him* it was simply a matter of camouflage. Jane could tell he didn't want to attract attention by varying from the arbitrary norm he had chosen—that of the human form.

Jane accepted it. The uncle who was—empty—the one in the cellar called Ruggedo, who had to be fed regularly on raw meat, so that Something wouldn't happen...

A masquerader, from somewhere. He had power, and he had limitations. The obvious evidences of his power were accepted without question. Children are realists. It was not incredible to them, for this hungry, inhuman stranger to appear among them—for here he was.

He came from somewhere. Out of time, or space, or an inconceivable place. He never had any human feelings; the children sensed that easily. He pretended very cleverly to be human, and he could warp the adult minds to implant artificial memories of his existence. The adults thought they remembered him. An adult will recognize a mirage; a child will be deceived. But conversely, an

intellectual mirage will deceive an adult, not a child.

Ruggedo's power couldn't warp their minds, for those minds were neither quite human nor quite sane, from the adult standpoint. Beatrice, who was oldest, was afraid. She had the beginnings of empathy and imagination. Little Charlie felt mostly excitement. Bobbie, the smallest, had already begun to be bored. . . .

Perhaps later Beatrice remembered a little of what Ruggedo looked like, but the others never did. For they reached him by a very strange road, and perhaps they were somewhat altered themselves during the time they were with him. He accepted or rejected food; that was all. Upstairs, the body of the Scoodler pretended to be human, while the Scoodler's head lay in that little, horrible nest he had made by warping space, so he was invisible and intangible to anyone who didn't know how to find the Road of Yellow Bricks.

What was he? Without standards of comparison—and there are none, in this world—he cannot be named. The children thought of him as Ruggedo. But he was not the fat, half-comic, inevitably frustrate Gnome King. He was never that.

Call him demon.

As a name-symbol, it implies too much and not enough. But it will have to do. By the standard of maturity he was monster, alien, super-being. But because of what he did, and what he wanted—call him demon.

CHAPTER II

Raw, Red Meat

ONE AFTERNOON, a few days later, Beatrice hunted up Jane. "How much money have you got, Janie?" she asked.

"Four dollars and thirty-five cents," Jane said, after investigation. "Dad gave me five dollars at the station. I bought some popcorn and—well—different things."

"Gee, I'm glad you came when you did." Beatrice blew out a long breath. Tacitly it was agreed that the prevalent socialism of childhood clubs would apply in this more urgent clubbing together of interests. Jane's small hoard was available not for any individual among them, but for the good of the group. "We were running out of money," Beatrice said. "Granny caught us taking meat

out of the icebox and we don't dare any more. But we can get a lot with your money."

Neither of them thought of the inevitable time when that fund would be exhausted. Four dollars and thirty-five cents seemed fabulous, in that era. And they needn't buy expensive meat, so long as it was raw and bloody.

They walked together down the acacia-shaded street with its occasional leaning palms and drooping pepper-trees. They bought two pounds of hamburger and improvidently squandered twenty cents on sodas.

When they got back to the house, Sunday lethargy had set in. Uncles Simon and James had gone out for cigars, and Uncles Lew and Bert were reading the papers, while Aunt Bessie crocheted. Grandmother Keaton read *Young's Magazine*, diligently seeking spicy passages. The two girls paused behind the beaded portieres, looking in.

"Come on, kids," Lew said in his deep, resonant voice. "Seen the funnies yet? Mutt and Jeff are good. And Spark Plug—"

"Mr. Gibson is good enough for me," Grandmother Keaton said. "He's a real artist. His people look like people."

The door banged open and Uncle James appeared, fat, grinning, obviously happy from several beers. Uncle Simon paced him like a personified conscience.

"At any rate, it's quiet," he said, turning a sour glance on Jane and Beatrice. "The children make such a rumpus sometimes I can't hear myself think."

"Granny," Beatrice asked. "Where are the kids?"

"In the kitchen, I think, dear. They wanted some water for something."

"Thanks." The two girls went out, leaving the room filled with a growing atmosphere of sub-threshold discomfort. The sheep were sensing the wolf among them, but the sheep-skin disguise was sufficient. They did not know. . . .

The kids were in the kitchen, busily painting one section of the comics with brushes and water. When you did that, pictures emerged. One page of the newspaper had been chemically treated so that moisture would bring out the various colors, dull pastels, but singularly glamorous, in a class with the Japanese flowers that would bloom in water, and the Chinese paper-shelled almonds that held tiny prizes.

From behind her, Beatrice deftly produced the butcher's package.

"Two pounds," she said. "Janie had some money, and Merton's was open this afternoon. I thought we'd better. . . ."

Emily kept on painting diligently. Charles jumped up.

"Are we going up now, huh?"

Jane was uneasy. "I don't know if I'd better come along. I—"

"I don't want to either," Bobby said, but that was treason. Charles said Bobby was scared.

"I'm not. It just isn't any fun. I want to play something else."

"Emily," Beatrice said softly. "You don't have to go this time."

"Yes I do," Emily looked up at last from her painting. "I'm not scared."

"I want to see the lights," Charles said. Beatrice whirled on him.

"You tell such lies, Charles! There aren't any lights."

"There are so. Sometimes, anyhow."

"There aren't."

"There are so. You're too dumb to see them. Let's go and feed him."

It was understood that Beatrice took command now. She was the oldest. She was also, Jane sensed, more afraid than the others, even Emily.

They went upstairs, Beatrice carrying the parcel of meat. She had already cut the string. In the upper hall they grouped before a door.

"This is the way, Janie," Charles said rather proudly. "We gotta go up to the attic. There's a swing-down ladder in the bathroom ceiling. We have to climb up on the tub to reach."

"My dress," Jane said doubtfully.

"You won't get dirty. Come on."

Charles wanted to be first, but he was too short. Beatrice climbed to the rim of the tub and tugged at a ring in the ceiling. The trap-door creaked and the stairs descended slowly, with a certain majesty, beside the tub. It wasn't dark up there. Light came vaguely through the attic windows.

"Come on, Janie," Beatrice said, with a queer breathlessness, and they all scrambled up somehow, by dint of violent acrobatics.

THE attic was warm, quiet and dusty. Planks were laid across the beams. Caratons and trunks were here and there.

Beatrice was already walking along one of

the beams. Jane watched her.

Beatrice didn't look back; she didn't say anything. Once her hand groped out behind her; Charles, who was nearest, took it. Then Beatrice reached a plank laid across to another rafter. She crossed it. She went on—stopped—and came back, with Charles.

"You weren't doing it right," Charles said disappointedly. "You were thinking of the wrong thing."

Beatrice's face looked oddly white in the golden, faint light.

Jane met her cousin's eyes. "Bee—"

"You have to think of something else," Beatrice said quickly. "It's all right. Come on."

Charles at her heels, she started again across the plank. Charles was saying something, in a rhythmic, mechanical monotone:

"One, two, buckle my shoe,
Three, four, knock at the door,
Five, six, pick up sticks—"

Beatrice disappeared.

"Seven, eight, lay them—"

Charles disappeared.

Bobby, his shoulders expressing rebelliousness, followed. And vanished.

Emily made a small sound.

"Oh—Emily!" Jane said.

But her youngest cousin only said, "I don't want to go down there, Janie!"

"You don't have to."

"Yes, I do," Emily said. "I'll tell you what. I won't be afraid if you come right after me. I always think there's something coming up behind me to grab—but if you promise to come right after, it'll be all right."

"I promise," Jane said.

Reassured, Emily walked across the bridge. Jane was watching closely this time. Yet she did not see Emily disappear. She was suddenly—gone. Jane stepped forward, and stopped as a sound came from downstairs.

"Jane!" Aunt Bessie's voice. "Jane!" It was louder and more peremptory now. "Jane, where are you? Come here to me!"

Jane stood motionless, looking across the plank bridge. It was quite empty, and there was no trace of Emily or the other children. The attic was suddenly full of invisible menace. Yet she would have gone on, because of her promise, if—

"Jane!"

Jane reluctantly descended and followed the summons to Aunt Bessie's bedroom. That prim-mouthed woman was pinning fabric and moving her lips impatiently.

"Where on earth have you been, Jane? I've been calling and calling."

"We were playing," Jane said. "Did you want me, Aunt Bessie?"

"I should say I did," Aunt Bessie said. "This collar I've been crocheting. It's for a dress for you. Come here and let me try it on. How you grow, child!"

And after that there was an eternity of pinning and wriggling, while Jane kept thinking of Emily, alone and afraid somewhere in the attic. She began to hate Aunt Bessie. Yet the thought of rebellion or escape never crossed her mind. The adults were absolute monarchs. As far as relative values went, trying on the collar was more important, at this moment, than anything else in the world. At least, to the adults who administered the world.

While Emily, alone and afraid on the bridge that led to—elsewhere. . . .

* * * * *

The uncles were playing poker. Aunt Gertrude, the vaudeville actress, had unexpectedly arrived for a few days and was talking with Grandmother Keaton and Aunt Bessie in the living room. Aunt Gertrude was small and pretty, very charming, with a bisque delicacy and a gusto for life that filled Jane with admiration. But she was subdued now.

"This place gives me the creeps," she said, making a dart with her folded fan at Jane's nose. "Hello, funny-face. Why aren't you playing with the other kids?"

"Oh, I'm tired," Jane said, wondering about Emily. It had been nearly an hour since—

"At your age I was never tired," Aunt Gertrude said. "Now look at me. Three a day and that awful straight man I've got—Ma, did I tell you—" The voices pitched lower.

JANE watched Aunt Bessie's skinny fingers move monotonously as she darted her crochet hook through the silk.

"This place is a morgue," Aunt Gertrude said suddenly. "What's wrong with everybody? Who's dead?"

"It's the air," Aunt Bessie said. "Too hot the year round."

"You play Rochester in winter, Bessie my girl, and you'll be glad of a warm climate."

It isn't that, anyway. I feel like—mm-m—it's like being on stage after the curtain's gone up."

"It's your fancy," her mother said.

"Ghosts," Aunt Gertrude said, and was silent. Grandmother Keaton looked sharply at Jane.

"Come over here, child," she said.

Room was made on the soft, capacious lap that had held so many youngsters.

Jane snuggled against that reassuring warmth and tried to let her mind go blank, transferring all sense of responsibility to Grandmother Keaton. But it wouldn't work. There was something wrong in the house, and the heavy waves of it beat out from a center very near them.

The Wrong Uncle. Hunger and the avidity to be fed. The nearness of bloody meat tantalizing him as he lay hidden in his strange, unguessable nest elsewhere—other-where—in that strange place where the children had vanished.

He was down there, slaving for the food; he was up here, empty, avid, a vortex of hunger very nearby.

He was double, a double uncle, masked but terrifyingly clear. . . .

Jane closed her eyes and dug her head deeper into Grandmother Keaton's shoulder.

Aunt Gertrude gossiped in an oddly tense voice, as if she sensed wrongness under the surface and were frightened subtly.

"I'm opening at Santa Barbara in a couple of days, Ma," she said. "I—what's wrong with this house, anyhow? I'm as jumpy as a cat today!—and I want you all to come down and catch the first show. It's a musical comedy. I've been promoted."

"I've seen the 'Prince of Pilsen' before," Grandmother Keaton said.

"Not with me in it. It's my treat. I've engaged rooms at the hotel already. The kids have to come too. Want to see your auntie act, Jane?"

Jane nodded against her grandmother's shoulder.

"Auntie," Jane said suddenly. "Did you see all the uncles?"

"Certainly I did."

"All of them? Uncle James and Uncle Bert and Uncle Simon and Uncle Lew?"

"The whole kaboodle. Why?"

"I just wondered."

So Aunt Gertrude hadn't noticed the Wrong Uncle either. She wasn't truly observant, Jane thought.

"I haven't seen the kids, though. If they don't hurry up, they won't get any of the presents I've brought. You'd never guess what I have for you, Janie."

But Jane scarcely heard even that exciting promise. For suddenly the tension in the air gave way. The Wrong Uncle who had been a vortex of hunger a moment before was a vortex of ecstasy now. Somewhere, somehow, at last Ruggedo was being fed. Somewhere, somehow, that other half of the double uncle was devouring his bloody fare. . . .

Janie was not in Grandmother Keaton's lap any more. The room was not around her. The room was a spinning darkness that winked with tiny lights—Christmas tree lights, Charles had called them—and there was a core of terror in the center of the whirl. Here in the vanished room the Wrong Uncle was a funnel leading from that unimaginable nest where the other half of him dwelt, and through the funnel, into the room, poured the full ecstatic tide of his satiety.

Somehow in this instant Jane was very near the other children who must stand beside that spinning focus of darkness. She could almost sense their presence, almost put out her hand to touch theirs.

Now the darkness shivered and the bright, tiny lights drew together, and into her mind came a gush of impossible memories. She was too near him. And he was careless as he fed. He was not guarding his thoughts. They poured out, formless as an animal's, filling the dark. Thoughts of red food, and of other times and places where that same red food had been brought him by other hands.

It was incredible. The memories were not of earth, not of this time or place. He had traveled far, Ruggedo. In many guises. He remembered now, in a flow of shapeless fissions, he remembered tearing through furred sides that squirmed away from his hunger, remembered the gush of hot sweet redness through the fur.

Not the fur of anything Jane had ever imagined before. . . .

HE REMEMBERED a great court paved with shining things, and something in bright chains in the center, and rings of watching eyes as he entered and neared the sacrifice.

As he tore his due from its smooth sides, the cruel chains clanked around him as he fed. . . .

Jane tried to close her eyes and not watch. But it was not with eyes that she watched. And she was ashamed and a little sickened because she was sharing in that feast, tasting the warm red sweetness with Ruggedo in memory, feeling the spin of ecstasy through her head as it spun through his.

"Ah—the kids are coming now," Aunt Gertrude was saying from a long way off.

Jane heard her dimly, and then more clearly, and then suddenly Grandmother Keaton's lap was soft beneath her again, and she was back in the familiar room. "A herd of elephants on the stairs, eh?" Aunt Gertrude said.

They were returning. Jane could hear them too now. Really, they were making much less noise than usual. They were subdued until about halfway down the stairs, and then there was a sudden outburst of clattering and chatter that rang false to Jane's ears.

The children came in, Beatrice a little white, Emily pink and puffy around the eyes. Charles was bubbling over with repressed excitement, but Bobby, the smallest, was glum and bored. At sight of Aunt Gertrude, the uproar redoubled, though Beatrice exchanged a quick, significant glance with Jane.

THEN presents and noise, and the uncles coming back in; excited discussion of the trip to Santa Barbara—a strained cheeriness that, somehow, kept dying down into heavy silence.

None of the adults ever really looked over their shoulders, but—the feeling was of bad things to come.

Only the children—not even Aunt Gertrude—were aware of the complete emptiness of the Wrong Uncle. The projection of a lazy, torpid, semi-mindless entity. Superficially he was as convincingly human as if he had never focused his hunger here under this roof, never let his thoughts whirl through the minds of the children, never remembered his red, dripping feasts of other times and places.

He was very sated now. They could feel the torpor pulsing out in slow, drowsy waves so that all the grown-ups were yawning and wondering why. But even now he was empty. Not real. The "nobody-there" feeling was as acute as ever to all the small, keen, perceptive minds that saw him as he was.

CHAPTER III

Sated Eater

LATER, at bedtime, only Charles wanted to talk about the matter. It seemed to Jane that Beatrice had grown up a little since the early afternoon. Bobby was reading "The Jungle Book," or pretending to, with much pleased admiration of the pictures showing Shere Khan, the tiger. Emily had turned her face to the wall and was pretending to be asleep.

"Aunt Bessie called me," Jane told her, sensing a faint reproach. "I tried as soon as I could get away from her. She wanted to try that collar thing on me."

"Oh." The apology was accepted. But Beatrice still refused to talk. Jane went over to Emily's bed and put her arm around the little girl.

"Mad at me, Emily?"

"No."

"You are, though. I couldn't help it, honey."

"It was all right," Emily said. "I didn't care."

"All bright and shiny," Charles said sleepily. "Like a Christmas tree."

Beatrice whirled on him. "Shut up!" she cried. "Shut up, Charles! Shut up, shut up, shut up!"

Aunt Bessie put her head into the room.

"What's the matter, children?" she asked.

"Nothing, Auntie," Beatrice said. "We were just playing."

* * * * *

Fed, temporarily satiated, it lay torpid in its curious nest. The house was silent, the occupants asleep. Even the Wrong Uncle slept, for Ruggedo was a good mimic.

The Wrong Uncle was not a phantasm, not a mere projection of Ruggedo. As an amoeba extends a pseudopod toward food, so Ruggedo had extended and created the Wrong Uncle. But there the parallel stopped. For the Wrong Uncle was not an elastic extension that could be withdrawn at will. Rather, he—it—was a permanent limb, as a man's arm is. From the brain through the neural system the message goes, and the arm stretches out, the fingers constrict—and there is food in the hand's grip.

But Ruggedo's extension was less limited.

It was not permanently bound by rigid natural laws of matter. An arm may be painted black. And the Wrong Uncle looked and acted human, except to clear immature eyes.

There were rules to be followed, even by Ruggedo. The natural laws of a world could bind it, to a certain extent. There were cycles. The life-span of a moth-caterpillar is run by cycles, and before it can spin its cocoon and metamorphize, it must eat—eat—eat. Not until the time of change has come can it evade its current incarnation. Nor could Ruggedo change, now, until the end of its cycle had come. Then there would be another metamorphosis, as there had already, in the unthinkable eternity of its past, been a million curious mutations.

But, at present, it was bound by the rules of its current cycle. The extension could not be withdrawn. And the Wrong Uncle was a part of it, and it was a part of the Wrong Uncle.

The Scoodler's body and the Scoodler's head.

Through the dark house beat the unceasing, drowsy waves of satiety—slowly, imperceptibly quickening toward that nervous pulse of avidity that always came after the processes of indigestion and digestion had been completed.

Aunt Bessie rolled over and began to snore. In another room, the Wrong Uncle, without waking, turned on his back and also snored.

The talent of protective mimicry was well developed. . . .

It was afternoon again, though by only half an hour, and the pulse in the house had changed subtly in tempo and mood.

"If we're going up to Santa Barbara," Grandmother Keaton had said, "I'm going to take the children down to the dentist today. Their teeth want cleaning, and it's hard enough to get an appointment with Dr. Hover for one youngster, not to mention four. Jane, your mother wrote me you'd been to the dentist a month ago, so you needn't go."

After that the trouble hung unspoken over the children. But no one mentioned it. Only, as Grandmother Keaton herded the kids out on the porch, Beatrice waited till last. Jane was in the doorway, watching. Beatrice reached behind her without looking, fumbled, found Jane's hand, and squeezed it hard. That was all.

But the responsibility had been passed on.

No words had been needed. Beatrice had said plainly that it was Jane's job now. It was her responsibility.

SHE dared not delay too long. She was too vividly aware of the rising tide of depression affecting the adults. Ruggedo was getting hungry again.

She watched her cousins till they vanished beneath the pepper trees, and the distant rumble of the trolley put a period to any hope of their return. After that, Jane walked to the butcher shop and bought two pounds of meat. She drank a soda. Then she came back to the house.

She felt the pulse beating out faster.

She got a tin pan from the kitchen and put the meat on it, and slipped up to the bathroom. It was hard to reach the attic with her burden and without help, but she did it. In the warm stillness beneath the roof she stood waiting, half-hoping to hear Aunt Bessie call again and relieve her of this duty. But no voice came.

The simple mechanics of what she had to do were sufficiently prosaic to keep fear at a little distance. Besides, she was scarcely nine. And it was not dark in the attic.

She walked along the rafter, balancing, till she came to the plank bridge. She felt its resilient vibration underfoot.

*"One, two, buckle my shoe,
Three, four, knock at the door,
Five, six, pick up sticks,
Seven, eight—"*

She missed the way twice. The third time she succeeded. The mind had to be at just the right pitch of abstraction. . . . She crossed the bridge, and turned, and—

It was dim, almost dark, in this place. It smelled cold and hollow, of the underground. Without surprise she knew she was deep down, perhaps beneath the house, perhaps very far away from it. That was as acceptable to her as the rest of the strangeness. She felt no surprise.

Curiously, she seemed to know the way. She was going into a tiny enclosure, and yet at the same time she wandered for awhile through low-roofed, hollow spaces, endless, very dim, smelling of cold and moisture. An unpleasant place to the mind, and a dangerous place as well to wander through with one's little pan of meat.

It found the meat acceptable.

Looking back later, Jane had no recollection whatever of it. She did not know how

she had proffered the food, or how it had been received, or where in that place of paradoxical space and smallness it lay dreaming of other worlds and eras.

She only knew that the darkness spun around her again, winking with little lights, as it devoured its food. Memories swirled from its mind to hers as if the two minds were of one fabric. She saw more clearly this time. She saw a great winged thing caged in a glittering pen, and she remembered as Ruggedo remembered, and leaped with Ruggedo's leap, feeling the wings buffet about her and feeling her rending hunger rip into the body, and tasting avidly the hot, sweet, salty fluid bubbling out.

It was a mixed memory. Blending with it, other victims shifted beneath Ruggedo's grip, the feathery pinions becoming the beat of great clawed arms and the writhe of reptilian liteness. All his victims became one in memory as he ate.

One flash of another memory opened briefly toward the last. Jane was aware of a great swaying garden of flowers larger than herself, and of cowed figures moving silently among them, and of a victim with showering pale hair lying helpless upon the lip of one gigantic flower, held down with chains like shining blossoms. And it seemed to Jane that she herself went cowed among those silent figures, and that he—it—Ruggedo—in another guise walked beside her toward the sacrifice.

It was the first human sacrifice he had recalled. Jane would have liked to know more about that. She had no moral scruples, of course. Food was food. But the memory flickered smoothly into another picture and she never saw the end. She did not really need to see it. There was only one end to all these memories. Perhaps it was as well for her that Ruggedo did not dwell overlong on that particular moment of all his bloody meals.

*"Seventeen, eighteen,
Maids in waiting,
Nineteen, twenty—"*

She tilted precariously back across the rafters, holding her empty pan. The attic smelled dusty. It helped to take away the reek of remembered crimson from her mind. . . .

would not discuss the matter more fully except in case of real need. And the drowsy, torpid beat in the house, the psychic emptiness of the Wrong Uncle, showed plainly that the danger had been averted again—for a time. . . .

"Read me about Mowgli, Granny," Bobby said. Grandmother Keaton settled down, wiped and adjusted her spectacles, and took up Kipling. Presently the other children were drawn into the charmed circle. Grandmother spoke of Shere Khan's downfall—of the cattle driven into the deep gulch to draw the tiger—and of the earth-shaking stampede that smashed the killer into bloody pulp.

"Well," Grandmother Keaton said, closing the book, "That's the end of Shere Khan. He's dead now."

"No he isn't," Bobby roused and said sleepily.

"Of course he is. Good and dead. The cattle killed him."

"Only at the end, Granny. If you start reading at the beginning again, Shere Khan's right there."

Bobby, of course, was too young to have any conception of death. You were killed sometimes in games of cowboys-and-Indians, an ending neither regrettable nor fatal. Death is an absolute term that needs personal experience to be made understandable.

Uncle Lew smoked his pipe and wrinkled the brown skin around his eyes at Uncle Bert, who bit his lips and hesitated a long time between moves. But Uncle Lew won the chess game anyway. Uncle James winked at Aunt Gertrude and said he thought he'd take a walk, would she like to come along? She would.

After their departure, Aunt Bessie looked up, sniffed.

"You just take a whiff of their breaths when they come back, Ma," she said. "Why do you stand for it?"

But Grandmother Keaton chuckled and stroked Bobby's hair. He had fallen asleep on her lap his hands curled into small fists, his cheeks faintly flushed.

Uncle Simon's gaunt figure stood by the window.

He watched through the curtains, and said nothing at all.

"Early to bed," Aunt Bessie said. "If we're going to Santa Barbara in the morning. Children!"

And that was that.

WHEN the children came back, Beatrice said simply, "Did you?" and Jane nodded. The taboo still held. They

CHAPTER IV

End of the Game

BY MORNING Bobby was running a temperature, and Grandmother Keaton refused to risk his life in Santa Barbara. This made Bobby very sullen, but solved the problem the children had been wondering about for many hours. Also, a telephone call from Jane's father said that he was arriving that day to pick up his daughter, and she had a little brother now. Jane, who had no illusions about the stork, was relieved, and hoped her mother wouldn't be sick any more now.

A conclave was held in Bobby's bedroom before breakfast.

"You know what to do, Bobby," Beatrice said. "Promise you'll do it?"

"Promise. Uh-huh."

"You can do it today, Janie, before your father comes. And you'd better get a lot of meat and leave it for Bobby."

"I can't buy any meat without money," Bobby said. Somewhat reluctantly Beatrice counted out what was left of Jane's small hoard, and handed it over. Bobby stuffed the change under his pillow and pulled at the red flannel wound around his neck.

"It scratches," he said. "I'm not sick, anyway."

"It was those green pears you ate yesterday," Emily said very meanly. "You thought nobody saw you, didn't you?"

Charles came in; he had been downstairs. He was breathless.

"Hey, know what happened?" he said. "He hurt his foot. Now he can't go to Santa Barbara. I bet he did it on purpose."

"Gosh," Jane said. "How?"

"He said he twisted it on the stairs. But I bet it's a lie. He just doesn't want to go."

"Maybe he can't go—that far," Beatrice said, with a sudden flash of intuition, and they spoke no more of the subject. But Beatrice, Emily and Charles were all relieved that the Wrong Uncle was not to go to Santa Barbara with them, after all.

It took two taxis to carry the travelers and their luggage. Grandmother Keaton, the Wrong Uncle, and Jane stood on the front porch and waved. The automobiles clattered off, and Jane promptly got some money

from Bobby—and went to the butcher store, returning heavy-laden.

The Wrong Uncle, leaning on a cane, hobbled into the sun-parlor and lay down. Grandmother Keaton made a repulsive but healthful drink for Bobby, and Jane decided not to do what she had to do until afternoon. Bobby read "The Jungle Book," stumbling over the hard words, and, for the while, the truce held.

Jane was not to forget that day quickly. The smells were sharply distinct; the odor of baking bread from the kitchen, the sticky-sweet flower scents from outside, the slightly dusty, rich-brown aroma exhaled by the sun-warmed rugs and furniture. Grandmother Keaton went up to her bedroom to cold-cream her hands and face, and Jane lounged on the threshold, watching.

It was a charming room, in its comfortable, unimaginative way. The curtains were so stiffly starched that they billowed out in crisp whiteness, and the bureau was cluttered with fascinating objects—a pin-cushion shaped like a doll, a tiny red china shoe, with tinier gray china mice on it, a cameo brooch bearing a portrait of Grandmother Keaton as a girl.

And slowly, insistently, the pulse increased, felt even here, in this bedroom, where Jane felt it was a rather impossible intrusion.

Directly after lunch the bell rang, and it was Jane's father, come to take her back to San Francisco. He was in a hurry to catch the train, and there was time only for a hurried conversation before the two were whisked off in the waiting taxi. But Jane had found time to run upstairs and say goodbye to Bobby—and tell him where the meat was hidden.

"All right, Janie," Bobby said. "Goodby."

She knew she should not have left the job to Bobby. A nagging sense of responsibility haunted her all the way to the railroad station. She was only vaguely aware of adult voices saying the train would be very late, and of her father suggesting that the circus was in town. . . .

It was a good circus. She almost forgot Bobby and the crisis that would be mounting so dangerously unless he met it as he had promised. Early evening was blue as they moved with the crowd out of the tent. And then through a rift Jane saw a small, familiar figure, and the bottom dropped out of her stomach. She *knew*.

Mr. Larkin saw Bobby in almost the same

instant. He called sharply, and a moment later the two children were looking at one another, Bobby's plump face sullen.

"Does your grandmother know you're here, Bobby?" Mr. Larkin said.

"Well, I guess not," Bobby said.

"You ought to be paddled, young man. Come along, both of you. I'll have to phone her right away. She'll be worried to death."

IN THE drug store, while he telephoned, Jane looked at her cousin. She was suffering the first pangs of maturity's burden,

the knowledge of responsibility misused.

"Bobby," she said. "Did you?"

"You leave me alone," Bobby said with a scowl. There was silence.

Mr. Larkin came back. "Nobody answered. I've called a taxi. There'll be just time to get Bobby back before our train leaves."

In the taxi also there was mostly silence. As for what might be happening at the house, Jane did not think of that at all. The mind has its own automatic protections. And in any case, it was too late now. . . .

[Turn page]

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When the taxi drew up the house was blazing with orange squares of windows in the dusk. There were men on the porch, and light glinted on a police officer's shield.

"You kids wait here," Mr. Larkin said uneasily. "Don't get out of the car."

The taxi driver shrugged and pulled out a folded newspaper as Mr. Larkin hurried toward the porch. In the back seat Jane spoke to Bobby, her voice very soft.

"You didn't," she whispered. It was not even an accusation.

"I don't care," Bobby whispered back. "I was tired of that game. I wanted to play something else." He giggled. "I won, anyhow," he declared.

"How? What happened?"

"The police came, like I knew they would. He never thought of that. So I won."

"But how?"

"Well, it was sort of like 'The Jungle Book.' Shooting tigers, remember? They tied a kid to a stake and, when the tiger comes—bang! Only the kids were all gone to Santa Barbara, and you'd gone too. So I used Granny. I didn't think she'd mind. She plays games with us a lot. And anyhow, she was the only one left."

"But Bobby, a kid doesn't mean a kid like us. It means a baby goat. And anyhow—"

"Oh!" Bobby whispered. "Oh—well, anyhow, I thought Granny would be all right. She's too fat to run fast." He grinned scornfully. "He's dumb," he said. "He should have known the hunters always come when you tie a kid out for the tiger. He doesn't know anything. When I told him I'd locked Granny in her room and nobody else was around, I thought he might guess." Bobby looked crafty. "I was smart. I told him through the window. I thought he might think about me being a kid. But he didn't. He went right upstairs—fast. He even forgot to limp. I guess he was pretty hungry by then." Bobby glanced toward the swarming porch. "Probably the police have got him now," he added carelessly. "It was easy as pie. I won."

Jane's mind had not followed these fancies.

"Is she dead?" she asked, very softly.

Bobby looked at her. The word had a different meaning for him. It had no meaning, beyond a phase in a game. And, to his knowledge, the tiger had never harmed the tethered kid.

Mr. Larkin was coming back to the taxi

now, walking very slowly and not very straight.

Jane could not see his face. . . .

* * * * *

It was hushed up, of course, as much as possible. The children, who knew so much more than those who were shielding them, were futilely protected from the knowledge of what had happened. As futilely as they, in their turn, had tried to protect their elders. Except for the two oldest girls, they didn't particularly care. The game was over. Granny had had to go away on a long, long journey, and she would never be back.

They understood what *that* meant well enough.

The Wrong Uncle, on the other hand, had had to go away too, they were told, to a big hospital where he would be taken care of all his life.

This puzzled them all a little, for it fell somewhat outside the limits of their experience. Death they understood very imperfectly, but this other thing was completely mystifying. They didn't greatly care, once their interest faded, though Bobby for some time listened to readings of "The Jungle Book" with unusual attention, wondering if this time they would take the tiger away instead of killing him on the spot. They never did, of course. Evidently in real life tigers were different. . . .

For a long time afterward, in nightmares, Jane's perverse imagination dwelt upon and relived the things she would not let it remember when she was awake. She would see Granny's bedroom as she had seen it last, the starched curtains billowing, the sunshine, the red china shoe, the doll-pincushion. Granny, rubbing cold cream into her wrinkled hands and looking up more and more nervously from time to time as the long, avid waves of hunger pulsed through the house from the thing in its dreadful hollow place down below.

It must have been very hungry. The Wrong Uncle, pretending to a wrenched ankle downstairs, must have shifted and turned upon the couch, that hollow man, empty and blind of everything but the need for sustenance, the one red food he could not live without. The empty automaton in the sunporch and the ravenous being in its warp below pulsing with one hunger, ravening for one food. . . .

It had been very wise of Bobby to speak through the window when he delivered his baited message.

UPSTAIRS in the locked room, Granny must have discovered presently that she could not get out. Her fat, mottled fingers, slippery from cold-creaming, must have tugged vainly at the knob.

Jane dreamed of the sound of those footsteps many times. The tread she had never heard was louder and more real to her than any which had ever sounded in her ears. She knew very surely how they must have come bounding up the stairs, thump, thump, thump, two steps at a time, so that Granny would look up in alarm, knowing it could not be the Uncle with his wrenched ankle. She would have jumped up then, her heart knocking, thinking wildly of burglars.

It can't have lasted long. The steps would have taken scarcely the length of a heartbeat to come down the hall. And by now the house would be shaking and pulsing with one triumphant roar of hunger almost appeased. The thumping steps would beat in rhythm to it, the long quick strides coming with dreadful purposefulness down the hall. And then the key clicking in the lock. And then—

Usually then Jane awoke. . . .

A little boy isn't responsible. Jane told herself that many times, then and later. She didn't see Bobby again very often, and when she did he had forgotten a great deal; new experiences had crowded out the old. He got a puppy for Christmas, and he started to school. When he heard that the Wrong Uncle had died in the asylum he had had to think hard to remember who they meant, for to the younger children the Wrong Uncle had never been a member of the family, only a part in a game they had played and won.

Gradually the nameless distress which had once pervaded the household faded and

ceased. It was strongest, most desperate, in the days just after Granny's death, but everyone attributed that to shock. When it died away they were sure.

By sheer accident Bobby's cold, limited logic had been correct. Ruggedo would not have been playing fair if he had brought still another Wrong Uncle into the game, and Bobby had trusted him to observe the rules. He did observe them, for they were a law he could not break.

Ruggedo and the Wrong Uncle were parts of a whole, indissolubly bound into their cycle. Not until the cycle had been successfully completed could the Wrong Uncle extension be retracted or the cord broken. So, in the end, Ruggedo was helpless.

In the asylum, the Wrong Uncle slowly starved. He would not touch what they offered. He knew what he wanted, but they would not give him that. The head and the body died together, and the house that had been Grandmother Keaton's was peaceful once more.

If Bobby ever remembered, no one knew it. He had acted with perfect logic, limited only by his experience. If you do something sufficiently bad, the policeman will come and get you. And he was tired of the game. Only his competitive instinct kept him from simply quitting it and playing something else.

As it was, he wanted to win—and he had won.

No adult would have done what Bobby did—but a child is of a different species. By adult standards, a child is not wholly sane. Because of the way his mind worked, then—because of what he did, and what he wanted—

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"Ylleen, swerve westward!" Farrel warned her desperately

NEVER THE TWAIN SHALL MEET

By BRETT STERLING

Out in space John Farrel keeps his tryst with Ylleen, gorgeous Martian girl whose love means—sudden death!

JOHN FARREL felt the same chill apprehension as his officers and men, but he couldn't show it.

It was a fine thing to be a space-ship captain—back on Earth. It was fine to walk out of New York Spaceport and have people glance with admiration and respect at your uniform and silver bars.

But it wasn't no good to wear those silver

bars when you were fifty million miles from Earth, with your crippled ship drifting into a big meteor-swarm, and your men looking at you in mute, scared appeal.

Captain Farrel braced his lanky figure and tried to keep a look of confidence on his dark, tired face as he spoke.

"The *Thetis* has been hit bad, men. But it's not hopeless. We'll still reach Ganymede

if we can fix up those smashed jets."

"Fix them up with what?" demanded Gorley, the first mate. The big red-headed Irishman, always either in the clouds or the depths, had dejection all over his battered face. "We've already used our spare jet-tubes and we've not enough refractory alloy to make more."

"We've got our lives, all ten of us, and enough oxygen for a couple of weeks," Farrel pointed out. "So we still have a chance."

He walked across the turbine-room, in which they had gathered after the stray meteor tore away the jet-tubes and part of the stern. He pointed through a window at the star-flecked void ahead.

"That meteor-swarm we're drifting toward—we may find the refractory metals we need there. Lots of meteors assay high in such metals."

A faint hope lighted their faces as they gazed. Then Binetti, the thin young navigator, suddenly yelled and pointed.

"Look at that!"

Captain Farrel swung back to the window in time to glimpse it. It was a sudden flare of light in space ahead of them.

It burst forth deep inside the vast, loose meteor-swarm, but it wasn't the red-hot glow of two ordinary meteors colliding. This was a blinding explosion of pure light, gone in an instant.

Farrel knew instantly what it meant, and what it meant to them. But for a moment, he couldn't speak.

It was Kells, the stocky second mate, who cried hoarsely:

"Good heavens, some of the meteors in this swarm are Negative!"

"Negative?" Gorley stared, then sat down and crossed himself. "Then that is *that*."

It was death-sentence, that blinding flash ahead. It was death-sentence for any ship that ventured amid Negative meteors.

Some of the crew-men looked stunned, bewildered. Kells was still staring from the window, his lips moving numbly. Binetti cursed softly with Latin fluency and passion.

FARREL felt the same impact of cold, ultimate despair. But he couldn't surrender to it. The bars on his sleeve wouldn't let him.

"So because some of this swarm is Negative, we just lie down and die?" he rasped. "Shall I open the airlock and get it over with?"

Gorley shook his red head heavily.

"It's no use, sir. We could maybe buck everything else, but you can't buck Negative matter."

The same despair was on all their faces, Farrel saw. The despair and dread which all space-men felt toward Negative matter.

It had been so since the first space-ships had taken off from Earth, forty years before. Had been so, since some of those ships had tried to land on Venus and Mars and had vanished in flares of energy.

That was the ghastly way in which men had first learned that Venus and Mars were Negative. Saturn was too, and Neptune also, it was believed. Only Mercury, Earth, Jupiter and Uranus, and their satellites, were Positive.

Farrel had often thought that the stunning discovery should have been foreseen. For the possibility of Negative matter had been realized by scientists since the discovery of the positron, back in 1932.

All matter consisted of atoms which had electrons revolving around a central proton. In Positive matter, ordinary Earthly matter, the proton had a positive charge and the electrons had negative charges. It had been blandly assumed that the matter of the whole universe was like that.

But Anderson's discovery of the positron in 1932 had cast first doubts on that assumption. For the positron was an electron, but it had a positive charge. Then in 1945 the Russian scientists, on their mountain-top, had trapped strange protons that drifted in from space, protons that had a negative charge.

Negative protons, positive electrons—these together formed matter exactly the reverse of ordinary earthly matter. They formed Negative matter. And when Negative and Positive matter came into contact, their opposing charges caused them to explode into a burst of photons, into pure energy.

Such an energy-explosion had happened when a Positive ship from Earth had first tried to land on the Negative world of Mars. It was what had happened in the swarm ahead when a Positive and Negative meteor had touched. It was what would happen to the *Thetis* and all in it, if and when it touched a Negative meteor in that devil's swarm.

Captain Farrel forced himself to speak evenly.

"Our chances are a lot worse than we thought. But they're not gone entirely."

He gestured ahead. "We may drift inside that loose swarm for days without touching a

Negative fragment. We can still escape, if in that time we can find a Positive meteor with the refractory metals we need."

Gorley's mercurial spirits did a rebound. "At that, we've a chance if our luck holds out," he cried. "We'll just pray that no Negative meteor crosses our path."

Kells grinned mirthlessly. "Praying is about all we can do, until the *Thetis* drifts to a nice, convenient Positive meteor of metals."

Binetti's black eyes lighted hopefully. "Shall I start running the spectroscanner on the nearest stuff in that swarm, sir?"

Farrel breathed less tightly as he saw that habit and discipline were regaining their hold.

"Yes, and meanwhile we'll get the space-suits ready to use," he suggested. "Kells, have the power-crews check their turbines."

The *Thetis* drifted on and on. It didn't seem to be drifting, in the following hours. It seemed to be standing still, hanging in the middle of the vast and solemn vault of watching stars.

But the radar screen showed they were moving into the outer fringes of the vast, loose swarm of debris. The swarm itself showed to the eye merely as a great, tenuous haze of creeping crumbs of light.

Binetti, sweating at his instruments in the nav-room, looked up doubtfully at Farrel.

"There are indications of Positive meteors with the metals we need, sir. But the whole swarm is rotten with Negative."

Farrel nodded.

"It would be," he said. "This debris between Mars and Jupiter is all rubbish left over from the formation of the planets."

The Sun had fathered all the planets, Positive and Negative alike. It was believed that the Sun consisted largely of neutrons or neutral protons, and that these were transmuted gradually into Positive and Negative atoms whose mutual destruction yielded the energy of the solar orb.

LONG ago, in bursts of creation whose strange periodicity was still a riddle, the Sun had thrown off alternate masses of the two different kinds of matter it created. And those masses had formed the planets, planets forever divided into two opposite kinds of worlds.

Farrel looked back from the nav-room at the red spark of Mars and the more distant white speck of Venus, almost lost in the Sun glare.

"Worlds we'll never be able to visit," he thought. "We've done a lot in forty years, colonizing Jupiter's moons and reaching out now to Uranus, but we'll never see those worlds."

Weariness increasingly drugged his brain. It seemed to Farrel suddenly that he had always been tired like this, since boyhood.

Toiling night and day to get his technical education, working his brain to the limit at Space Academy, sweating his way up to a Captain's bars—and all for what? To die here now, in this faraway void?

Farrel had no illusions. Their chances were a hundred to one. Ten years ago, he'd have thought such a death glorious. But a man of thirty couldn't think like one of twenty.

Binetti's cry, an hour later, jerked Farrel out of his tired doze.

"There's another ship drifting in this swarm!"

"Another ship?" echoed Farrel, astounded. "Here, give me that scanner—"

"It's just north of us in the swarm," Binetti said excitedly.

Space-men had divided the equatorial plane into four arbitrary quadrants. North, east, south, west, zenith and nadir were the arbitrary directions of space. Farrel peered tautly northward now.

"By Heaven, there is!" he muttered. "A ship drifting near us here in the swarm. No jet-flares showing. It must be crippled, like us."

Within an hour, the men of the *Thetis* could see the other ship with unaided eyes. It was drifting powerless in the vast, rotating swarm of meteoric debris, as they were drifting.

But it looked different from their own standard, torpedo-shaped craft. This other vessel was oddly foreshortened, glinting in the thin starshine like an elongated metal egg.

"It's no ordinary Jupiter-run ship," said Gorley in puzzled tones. "Must be one of the new experimental ships they're always trying out."

"Their hull looks intact," Kells remarked. "It must have been turbine failure that brought them in here."

Excited relief soared in Farrel.

"But their jet-tubes look okay! This is our chance! We can surely fix up one of our two ships and get away!"

The other men quickly realized that. Faces brightened, taut lips relaxed, light came back into their eyes.

Farrel gave quick orders. "Kells, you and

I will go across in space-suits and find out if anyone's living on that craft. We'll have to get a line between ships soon, before the drift separates us."

He and the second mate were soon attired in the heavy suits and transparent helmets. In the airlock they tested their space-phones, oxygenators and hand-rocket impellers, and then leaped out into space.

Pointing their impellers backward, they used the little rocket jets to hurl them toward that other drifting ship, a quarter-mile away.

Awesome, floating forward here in the infinite abyss! Farrel had done it before but he would never get used to it. And his skin crawled at the thought of the Negative matter in the swarm around them.

Kells' voice came excitedly on the space-phone.

"That ship's not dead, sir! There are people coming out from it!"

Farrel's pulse jumped as he saw that three figures had leaped out from the oval ship and were coming by impeller to meet them.

"They must have sighted our ship just as we saw theirs," Kells was saying. "Now we can surely make repairs and get away."

"If a Negative meteor doesn't hit us first," warned Farrel.

Kells was shooting eagerly ahead to meet the oncoming three figures. Farrel, following, saw that the space-suits of these three were as unusual as their experimental ship. Not only their helmets but their whole suits seemed to be of transparent plastic.

"Why, one of the two in back is a girl!" came Kells' surprised exclamation from ahead. "Captain, I—"

At that moment, Kells' suited figure met the man leading the three strangers. They clasped gloved hands to avoid drifting past each other.

A blinding flare of energy exploded where Kells and the other man had just touched! And as that flare died, the two men were—gone.

"Stars in heaven!" choked Farrel. "Those people—they're Negative!"

THE hideous unexpectedness of it stunned his brain, left him floating numbly. Floating right toward the remaining two strangers!

He glimpsed them clearly, inside their transparent suits. They were white-skinned people like himself. One was a young man.

The other person, the nearest, was a dark-haired girl whose wide, horrified green eyes

met his gaze. Was she shouting to him?

Farrel couldn't see any space-phone mike inside her helmet. These people didn't seem to have space-phones at all.

Yet he heard something! Not with his ears. He heard it dimly in his *mind*, a thought and not a voice. A warning thought!

"Keep—away—death—if—touch—"

Warning thoughts inside his brain? Had he gone crazy?

"Farrel, use your impeller! Get back!" came Gorley's voice in frantic warning from the ship, over his space-phone.

That real, familiar voice snapped Farrel out of his daze enough to make him shift his impeller. Its flaming jet checked his drift.

The girl had similarly checked herself. She and the man floated a dozen yards away from Farrel, staring wildly at him.

Farrel saw her more clearly now, the broad, low forehead, the wide, stunned green eyes, the parted red lips, and the rounded limbs hardly concealed by the short tunic she wore inside her transparent suit.

He forced speech from a dry throat. "Good grief! What are you people? You can't be human."

The girl saw him speaking. She shook her head. She couldn't hear him. He remembered that she had no space-phone in her helmet.

"But how do they talk to each other in space without phones?" Farrel wondered dazedly.

"Not talk—thought—brain waves—amplified—"

Again, those sudden thoughts rushed through his mind. Thoughts that were not his.

Dimly, he remembered something. The cephalic brain-waves discovered back in 1929 by Berger, those minute electric oscillations of the brain—could it be that they were used somehow for communication?

"For talk, yes! We use—apparatus that—amplifies our brain-waves and broadcasts them at short range. Mechanical telepathy."

He was hearing those thoughts much more clearly now, as the girl came a little closer! Mechanical telepathy, thought-pulsations electrically amplified and broadcast to every nearby brain!

He had learned a little to catch her quick mental messages.

"You have no amplifier, but at close range I can faintly receive your thought," she was telling him. "You are—receiving mine?"

"Yes," he started to say, but the girl made a quick gesture.

"Think your answer. Think it with all your mind, as you speak it!"

Farrel tried to do that as he spoke hoarsely.

"You people—your ship—you're really Negative? Living people of Negative matter?"

Her mental answer echoed in his mind.

"And you are of the other kind of matter? But it is incredible! No one has ever dreamed of that."

That went double, Farrel thought numbly. No one in his own world had seriously thought that there might be people who were Negative.

Yet why not? There were whole Negative worlds, Mars, Venus and others. Why shouldn't life have risen on them, the same as on Earth? Negative matter was just as good for that purpose as Positive!

His brain reeled. He tried to think concentratedly as he asked:

"Who are you? What world are you from?"

"I am Ylleen," was the girl's replying thought, as nearly as he could grasp it. "And I come from the red planet yonder."

Her arm gestured toward the far red spark of Mars.

"Our ship was returning home from the sixth planet when its turbines failed. We drifted into this swarm. We have been working to repair them."

Ylleen? A girl from the Negative world of Mars, a Negative girl talking to him here by amplified thought-waves? It all seemed impossible.

Two wholly different peoples co-existing in the Solar System without knowing of each other until this chance encounter in space? Two peoples infinitely separated by their basic difference in matter?

He had to admit its possibility. Neither folk had been able to visit the other's worlds, so had not even suspected the other's existence till—

"Farrel! Behind you!"

That sharp, warning cry in his ears came suddenly from the distant *Thetis* in Gorley's voice.

At the same moment, Ylleen and the man with her pointed behind him in frantic warning.

Farrel twisted his neck and glimpsed the jagged, thirty-foot ball of stone riding ponderously through the swarm toward them.

"Quick!" came Ylleen's flashing thought.

"Use your impellers!"

FARREL'S impeller hurled him zenithward and Ylleen shot up in the same direction. But the Negative man near her misjudged direction.

"Bran, upward!" Ylleen's frantic amplified thought directed at the other Martian impinged on Farrel's brain. "You're heading wrong!"

Bran, the Negative man, saw his mistake and tried to dodge clear with his impeller but was a shade too late.

The edge of the jagged mass brushed his space-suit. There was a blinding explosion of light. The Negative man and a segment of the meteor vanished in it, and then the great stone mass thundered on.

Ylleen's thought came agonized with grief. "It was a Positive meteor and it grazed him!"

"Ylleen, swerve westward!" Farrel shouted, thinking the warning urgently as he did so. "There's drift behind that meteor!"

A little cloud of fragments, of meteor-debris, was flowing toward them like a loose cataract of stone in the wake of the giant.

Positive or Negative? Whichever that drift might be, it would be death to one of them, Farrel knew. He and the Negative girl were perilously close together as their impellers hurled them hastily away.

The loose river of stone fragments flowed past behind them, following the gravitational suck of the big meteor. Wandering fragments that strayed near Farrel made his flesh creep, for they might be Negative.

Finally, he and the Negative girl paused a little apart from each other in space.

"This is a devil's nest of danger," Farrel warned. "We'd better each get back to our own ships before we get hit."

"Our ship is almost repaired," came Ylleen's thought. "Is there any way we can help you?"

Farrel made a gesture of helplessness.

"No way. You can't give us spare jet-tubes or anything else, for you and all your stuff are Negative. But thanks for the offer."

He looked around, but neither ship was now in sight. There was nothing but the great starry void, alive with moving crumbs of light.

"Gorley!" he called into his space-phone. "Get a direction fix on me and tell me which way to come!"

There was no answer, though he called repeatedly. A chill came over Farrel as he realized what it meant.

"I can't reach my people with my short range space-phone. We went further than I thought, dodging that drift."

"Nor can I reach my people!" Yleen exclaimed. "Our telepathic amplifiers are also built only for short-range work."

Floating there a little apart, they looked at each other in simultaneous dismay.

"We are lost!" the girl said. "We've no idea where our ships are."

Lost? Farrel felt the disastrous shock of it. Lost here in a swarm that was laden with Negative matter, and with his only companion a girl whom he couldn't even touch without annihilating them both!

He realized now, too late, what had happened. The meteor-swarm was a loose, swirling net that rotated in currents of varying speed. The complicated currents had swept them apart from the ships, and their own impellers had quickly widened the distance.

Farrel desperately tried to determine direction by the position of the Sun and inner planets.

"The ships must be drifting somewhere in that direction," he said finally, pointing. "They can't be too far away from us yet."

"And they must still be fairly near each other, so we will go together," Yleen said.

They triggered their impellers and started rocketing in that direction, at a respectful distance from each other.

Glancing at the Negative girl as they hurtled on, Farrel felt growing admiration. Her lovely face was unafraid. She asked him his name.

Her thought repeated it oddly, as a sound like "Far-ul."

"I wish there were some way our people and worlds could know each other," he told her.

"Far-ul, so do I. Perhaps some day they can. Our scientists have been trying to convert Negative to Positive matter by first attaining an intermediate neutral stage. But they have not yet succeeded."

"It is only out here in empty space that we two could ever have met like this, without destroying each other," she added.

"Yes," thought Farrel. "Positive is Positive, and Negative is Negative—"

"—and never the twain shall meet,

Till Earth and sky stand presently

At God's great Judgment-Seat."

"You quote one of your poets?" Yleen's thought asked. "But it is true. For isn't this

vastness of space like a mighty Judgment-Seat?"

They hurtled on and on, frequently twisting their heads to watch for the death that was never far from them in the whirling swarm.

Over another flowing cataract of stone fragments, rocketing hastily upward to avoid the gravitational suck of a ten-mile plane-toid, they pressed steadily in the direction on which Farrel had fixed.

Cold conviction of error crept upon him after an hour. For they were still within the swarm, but saw nothing of the two ships.

"We'd better swerve eastward," he said, worried by his discovery. "We've got to compensate for the faster current as well as our own deviation."

"Far-ul, do you think we shall find the ships before our oxygen and impeller-charges give out?" Yleen's thought questioned.

Her face, and the tone of her telepathic question, were calm and without a trace of hysteria.

FARREL'S heart warmed to her. He wished he'd met a girl like her in his own world, years ago. He mightn't have had such a lonely life.

"You've oxygen for a couple of hours yet?" he asked anxiously. "So have I. We'll surely find them before that runs out. The ships will certainly try to signal us."

The worst of it was, he thought, that no ordinary beacon signal would be visible in this great swarm of sparks. And they were completely out of space-phone range.

As they steadily worked their dangerous way on through the swarm, he asked Yleen eager questions about her world of Mars.

Her telepathed descriptions built in Farrel's mind a picture of moondrenched red deserts, of little fairy cities of pink plastic, of a girl who had longed to be a technician and help in conquering space.

"Your Earth is not like that, Far-ul?" she asked.

"No, though we too have deserts," he said. "But there are great green oceans too, and blue skies and snowy mountains and great plains."

He found himself talking about his own life, something he had never done before to any girl.

Yleen's green eyes were understanding. "I think you have been very lonely, Far-ul."

"I've had my job to do the same as you,

the job of helping open up the other Positive worlds," Farrel said.

"We two are much alike," Yleen said. "Far-ul, I am glad that we met!"

"And I!" he exclaimed impulsively. "Yleen, I wish you were a girl of my own world."

She smiled at him a little sadly.

"Would it make much difference now, when the end for us may be near?"

"Don't say that," he begged her. "We'll get out of this yet. We're nearing the outer fringe of the swarm and must see the ships soon."

They had to use their impellers constantly to dart aside from onrushing planetoids or gleaming showers of fragments. Each of them watched a hemisphere of the void for danger as they worked forward.

Farrel's weariness increased. He saw Yleen's face white and strained inside her helmet, but she flashed her brave smile when she saw him looking.

Impelling himself too violently away from an oblong stone mass of which Yleen had given warning, Farrel found himself only a foot away from her.

"Far-ul, back!" she cried, using her own impeller to recoil from him. She added shakily then, "If you had touched me—it would have been awful!"

He knew, with an icy sensation along his spine, what that would have meant. Instant annihilation, for both of them.

His oxygen-tank needle was dropping steadily back toward zero. The blasts of his impeller seemed a little weaker, too.

They hurtled up to avoid a loose cluster of football-sized rocks, then hovered over it and looked ahead in appalled dismay.

They had come almost to the outer fringe of the swarm. And neither of the two ships was in sight anywhere in the starry vault!

"Yleen, I've led you in the wrong direction," Farrel said, in bitter self-reproach. "I've thrown away your chances."

"We shared the same risk," she told him steadily. "It's not your fault."

They floated, hovering over the cluster of rocks without attempting further search. For both knew that time was running out now.

Yleen looked at him.

"If I must die, I am glad that it is this way," she said. "I am not afraid, with you."

He saw in her face, across a dozen yards of space, what he had never seen in any woman's face in all his lonely years. And he felt

a warm, bursting emotion released in him.

"Yleen, listen!" he said huskily. "It's madness to say this. But I never loved any girl in my life, and I love you!"

Her soft green eyes shone with a wonderful gladness. "Far-ul, is it true? For I know that I love you. From the first, I have been wishing that we might have been of the same world, of the same kind."

Wistful longing quivered in her white face. "If we could have had but a little time together—if we could only have touched hands, even! But we can't, we can't! All that we can do together is to die."

BLIND waves of heartbreak rose in Farrel as he realized the tragic trap that fate had set for him.

To meet at last this girl he loved, and to be doomed never even to touch her! To meet here in the solemn vault of space in a death-trap from which they could not escape—it was so hopeless!

"Yleen, you have got to escape!" Farrel exclaimed fiercely. "I'm not going to let you die."

A desperate expedient had flashed across his mind. "Tell me, if we could signal your ship would it be able to come for you?"

"I think so," the Negative girl said wonderingly. "Its turbine-repairs should be completed by now. But how can we signal?"

He pointed down at the cluster of rocks below them, over which they were drifting.

"Some of those little meteorites must be Positive, and some Negative. You can handle the Negative ones, and I the others. If we hurl two meteorites of opposing kinds together, the flash they make will be visible a long way through the swarm. And a series of such flashes—"

Yleen instantly understood. "But my ship, my people, would not be able to help you, Far-ul!"

Farrel lied quickly. "My own ship should be repaired too, by now. They too will see and come."

Yleen did not flinch at the prospect of entering the loose, drifting cluster below. But she asked:

"How can we tell which meteors are Negative and which are Positive?"

Farrel had foreseen that necessity.

"Use your impeller-blast on each one as you approach it, Yleen. The atomic particles from your blast are Negative—if they start a sudden flare, the meteor is Positive."

He used the same system of detection himself, when they had gingerly moved down into the cluster.

Here, danger was close all around them. They were drifting with the cluster and its stones seemed merely to be floating around them, but a touch of the wrong kind of meteor meant destruction.

Farrel turned his own impeller-blast on the nearest meteor.

It flared dazzlingly, a rind of its surface vanishing.

He backed hastily away, knowing it was Negative. He tried another. The blast merely fused the surface of this stone a little. Farrel quickly advanced and seized it.

Ylleen had already grasped a Negative meteor a little larger than his. They could not throw them, floating free as they were. So, at Farrel's direction, they rocketed toward each other with the stones, then at the last moment released the two little meteors and curved away.

The two meteors met and a soundless burst of brilliance exploded in the void, instantly vanishing.

"Now another!" sweated Farrel. "If they only see one flash, they'll think it merely a natural collision."

Again, and then again, they ventured down into the cluster for opposing meteors and hurled them together to cause brilliant flashes.

The fourth time, Ylleen's thought came to him in warning.

"Far-ul, I can do little more. My oxygen will soon be gone."

"If I could only give you some of mine!" he answered agonized.

He couldn't give her any. That was the bitterest torment of all. His oxygen, like everything else about him, would be instant death for her.

Her eyes clung to his across the little space that separated them.

"I am not afraid. Not even now, so long as you are here!"

And then, out of the maze of swarming sparks, a red flare of rocket-jets and an on-rushing, oval black bulk loomed toward them.

"It's your ship!" Farrel cried out eagerly. "They've seen, and have come for you!"

"But *your* ship has not come!" exclaimed the Negative girl, fear in her voice.

"It will come soon," lied Farrel. "Quick, be ready to get aboard."

"I will not leave you here to die alone!" flamed Ylleen.

A wonderful, yearning emotion flooded Farrel's heart as they looked at each other while the Negative ship loomed closer.

"There's nothing you can do. Your ship, your people, can't help me. You must go, Ylleen."

"No, there's still a chance!" she insisted. "My people will know where your ship lies in the swarm, Far-ul! Wait!"

HE KNEW that she was directing her thought at the oncoming vessel whose brake-jets were now slowing it to a stop. He could vaguely sense the swift, amplified telepathic question and answer.

"They do know where your craft lies, Far-ul!" she told him. "They say your friends have found a Positive meteor with the metals that they need, and are repairing your vessel. We can lead you there—"

"No," he told her quietly. "My impeller is almost exhausted, Ylleen. And I can't use yours."

"Far-ul, listen! Gravitation operates the same with Positive as with Negative matter. You can't touch our ship—but its gravitational suck can tow you through the swarm to your own vessel, if you can keep from contact with us."

It was a wild, hairbreadth chance that was offering itself, Farrel well knew. But he seized on it.

"It could be done. And it's the only way. Tell them to try it, Ylleen."

The big Negative vessel had come to a halt near them, its airlock door open and waiting. The gravitational pull of the big mass was such that Farrel had to use his weakening impeller to keep from floating toward it.

Ylleen went into the ship and then came back out into the airlock near which Farrel was floating.

"I have replenished my oxygen and I have told them what they must do," she said tensely. "They will start gently."

Even that gentle start almost shook Farrel free of the Negative ship's pull. From the airlock, Ylleen's space-suited figure watched, stiff with anxiety for him.

Slowly, cautiously, the oval ship moved through the swarm. Held in its gravitational suck, Farrel found himself circling the moving vessel like a tiny, erratic satellite.

His impeller's blast was fast dwindling, as he used it to keep from a deadly contact.

Twisting, squirming, frantically firing his feeble little blasts, he was dragged on with the Negative ship.

It seemed eternities, to Farrel. But at last the oval craft groped its way above a meteor-stream and into view of a long, torpedo-shaped ship to which was lashed a big, jagged meteor.

"The *Thetis*!" Farrel cried. "Gorley, can you hear me?"

The mate's voice came in a shout on his space-phone. "Mother of Heaven! It's the Captain come back! Get our airlock open!"

The Negative ship had again slowed to a drift. From its open airlock, Yleen came toward Farrel. She came so close that he could clearly see her white, strained face.

"Yleen, we're safe," he said huskily. "But this has to be goodbye."

Her thought was quivering. "Must it be goodbye for always?"

"It must," he said heavily. "We can never visit each other's worlds. But—I'll never love anyone else, Yleen!"

"Far-ul, listen!" she cried. "We can at least meet here again in space. Will you meet me here, an Earth-year from now?"

Farrel answered eagerly. "I will! We can meet above this swarm, by radar rendezvous. I'll be here!"

He saw that her face was wet with tears as she turned and impelled herself into the airlock of her ship.

In a few minutes, Farley was inside the *Thetis*. Gorley and Binetti unscrewed his helmet and ripped off his suit.

"How did you get back?" the stupefied mate demanded. "And did you know that we've got enough refractory metals out of that big meteor outside to forge new jet-tubes? And—"

Farrel didn't listen. He was looking out of the window at the Negative ship, as it blasted on its way out of the great swarm.

It was on its way home to Mars, to the planet he could never visit. And Yleen was going with it. But he seemed to hear still in his mind a fading telepathic cry.

"An Earth-year from now, Far-ul! I will be here!"

* * * * *

On Ganymede's busy spaceport, Gorley tried a last vain expostulation as Farrel walked toward his waiting space-speedster.

"In the year since we had that adventure in the swarm, I thought you'd have recovered your reason!" he stormed. "You can't keep

that crazy rendezvous!"

"Yleen will be there," Farrel said steadily. "And I am going to meet her."

GORLEY swore. "It was only the excitement and danger and all that made you think you were in love with her. And even if you two do love each other, what good will it do you to meet? You can't even touch her."

"Just to see her again will be enough," Farrel told him. "I'm going, Red."

His speedster took off with a rush and all the long hours and days that he flew through space it seemed to him that his heart was calling him homeward.

When he finally brought his little craft above that vast swarm of debris, he saw instantly the other little ship that showed on his radar screen. He was soon as near it as he could safely go, and hurrying into his space-suit.

Out from that other little ship to meet him came another space-suited figure. On it came, until they were but a few yards apart.

"Yleen!" he cried, his voice throbbing. "I knew you would come."

For a time, they looked at each other. And Yleen's face was pale and strange.

"Far-ul, I came because I do not want to be separated from you again, ever."

"But we can't be together!" he protested, torturedly. "Not in this life!"

"Would you risk death if we could come together?" she asked him tensely.

"Of course I would!" he exclaimed. "But how?"

She interrupted by rocketing toward him. And her thought reached him like a sobbing cry.

"Then come, Far-ul!"

He could not understand. If they touched, they would vanish together in a blaze of force and light.

But a deep impulsion, a perfect trust, sent Farrel hurtling to meet her. Better to face death than to go back to the old loneliness and forget the only girl he had ever loved!

He saw her white face inside the helmet, as they rushed toward each other. Their outstretched hands met!

And nothing happened!

They were drifting together there in space, arms locked around each other, and nothing had happened at all!

Farrel's brain reeled. "Yleen—what does it mean? You're not Negative, now?"

"No, I am like you now!" came her mental cry. "And we can be really together, Far-ul."

She told him eagerly, "I told you that the scientists of my world had been trying to convert Negative into Positive matter by first attaining an intermediate neutral stage. It was hoped their experiments were near success. That's why I asked you to meet me here."

"I don't understand!" Farrel marveled. "How could they make Negative matter into Positive?"

"By first making it neutral," she reminded. "They worked in a laboratory in free space, handling matter by magnetic tractor-beams. They found a way to bombard a piece of Negative matter with streams of neutrons so that a neutron replaced each negative proton in that bit of matter."

Farrel could dimly understand that.

"A neutron will displace a proton in a nucleus, yes," he said. "But since it has no charge, it couldn't hold the positive electrons and they'd instantly rush free."

"And when that happens, the neutron-nuclei instantly emit negative electrons!" she exclaimed.

"Of course!" Farrel cried. "And when a neutron emits a negative electron, it instantly itself becomes a positive proton! Positive protons and negative electrons—it would be Positive matter then!"

"It was not quite as simple as that," Yleen corrected. "Free negative electrons had to be jetted into the matter at the same instant

to complete the structure of its atoms. But the whole process was almost instantaneous, starting automatically when triggered by the neutron bombardment."

Farrel was staggered by the colossal nature of that achievement of Martian science.

"And they did that to you, Yleen?"

"I offered myself as the first living subject for their process," she said simply. "In their laboratory in free space, they converted me and my little ship into Positive matter."

"But why didn't you tell me at first?" he cried.

Her eyes clung to his face.

"Far-ul, the whole process was theoretically perfect but there *might* be an error. I couldn't let you risk facing death with me unless you were willing."

The risk that she too had taken, the perfect willingness with which she'd accepted perpetual exile from her own world, rushed over him.

He held her more closely, even their space-suits not lessening the wonder of actually having her in his arms.

"Yleen! Yleen!"

She told him, presently, "It means that by that process of conversion, men of our worlds can visit each other in future. The two civilizations can grow together. Perhaps, even, whole worlds can be converted."

He could not think of that future of many worlds. Moving with her toward his ship, his arms locked about her, he could only think of the future that would be theirs alone.

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(Adm.)

POCKET UNIVERSES

By MURRAY LEINSTER

When Latin-American tyrant José Guttierrez visits New York, political fugitive Luis Santos perfects a machine that can eliminate space—and exacts fearsome, fantastic vengeance!

CHAPTER I

Fantastic Device



WITH Santos looking at me with a queer fixed grin on his face I did as he had asked me to. He'd said something about a diamagnetic device he wanted me to try, so I picked up a screw-driver from the floor—Santos was always hope-

lessly untidy in his laboratory—and turned on the switch he'd indicated. I meant, then, to see what happened when I moved the screw-driver nearer the copper-crystal-wire contraption he had on his workbench near the window. But I didn't. Because the instant I turned on the switch, the contraption vanished.

My mouth dropped open.

"Open the switch, *amigo mío*," Santos said softly.

I opened it—and the contraption was back on the bench. It was a weird-looking thing, that instrument—a copper-bar center, and crystal rods, and wire wrapped around it in a distinctly lunatic pattern. It looked like Rube Goldberg might have designed it. But it was certainly real and certainly solid. I reached up my hand to touch it. It was there, all right!

Santos spoke again, in a dry voice.

"I think that you saw the same thing I did. Yes. So now I am not insane. Or rather, I know that we are all crazy together to think that we know anything! Let us go and have lunch. I have achieved a great triumph."

"Hold on!" I said violently. "Let me do that again."

I threw the switch. The copper-crystal-wire device ceased to be. Now that I was

not taken altogether by surprise, though, I could see that where it had been wasn't altogether normal. There was an oddity about the space it had occupied. It wasn't blurred, exactly, and it wasn't exactly distorted. But it hurt my eyes to look through it.

I gulped, and turned off the switch a second time. The object was solidly back, just where it had been. Santos had one of his queer looking arc lights focused on the table. Its rays made everything visible. The device was there, all right!

"W—wait a minute!" I said, shaken. "You can't do this to me! What is it, Santos? What the devil happened?"

"It disappears," said Santos. He was a queer, dried-up little runt of a Latin-American, and I liked him very much. "It temporarily ceases to be. I am as much disturbed as you are."

I THREW the switch a third time. The blasted thing vanished. I reached toward it and stopped, cautiously.

"Is it dangerous to touch when it's turned on?"

"Try," said Santos. He shrugged until his shoulders seemed almost to go up to his ears. "I have tried. I cannot do it."

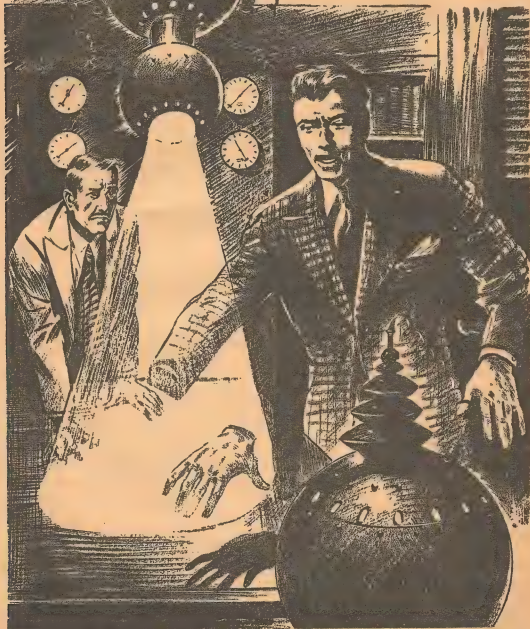
The peculiar grin came on his face again. It seemed to be compounded of amazement, and wonder, and pride, and a look of startled but very deep satisfaction.

I reached for the thing I knew must be there. It was invisible, of course—which was fantastic enough in itself—but there has been a lot of theorizing about invisibility. If one can bend light-rays around an object, it will become invisible.

There are conditions of refraction in which an opaque object cannot be seen. And you can print two dots side by side on a sheet of paper, and hold the paper a certain distance from your eyes and one of them disappears—until you move the paper. Invisibility is hard enough to imagine, but you can con-

An Astonishing Novelet

Suddenly I was close to fainting because in the place where the contrivance had been there was nothing and there was a space between my wrist and my forearm



cede that it might be brought about—just possibly could be managed. So I reached for that copper-crystal-wire contrivance.

My hand went through the place where it had been. I felt nothing. I reached around it and swept my arm toward myself, to be sure of including it in the sweep. And then I came very close to fainting. Because—this is going to be hard to take—I didn't feel anything in the least peculiar, but suddenly my hand was away over to the left, a good foot and a half farther from my elbow than was customary, and there was a space between my wrist and forearm.

I made what must have been a strangled, squawking noise and stumbled backward. And there was my hand on the end of my arm, just as it always has been. But I felt chilly all over and there was cold sweat running down my face.

Luis Santos looked at me with the same queer gleam in his eyes.

"Precisamente," he said, nodding. "I have felt all of this. It is extremely upsetting. Think how I felt when I found out that I had made it!" He stood up. "I think we had better go to lunch. A cup of coffee would be good for our nerves."

But I turned the switch off, and the thing was back, and I turned it on and it wasn't there, and I felt that queer stinging effect in my eyes. But I didn't try to touch it again.

"Listen, Santos!" I said shakily. "This is too screwy. What is it?"

He shrugged again, and his face had the same queer startled expression on it.

"I designed a diamagnet," he told me. "There is no such thing. There cannot be such a thing. But I evolved a theory which said that if I did such-and-such things, a diamagnet would result. I checked the theory, step by step. Every step was sound. So I made it. If it proved to be a diamagnet, I reasoned, I would have proved certain accepted principles of physics to be false.

"On the other hand, if it did not prove to be a diamagnet, certain other accepted principles would prove to be false. And I was shocked to observe that both are true.

"A diamagnet cannot exist. But this device should be one. Both theories are correct. The device without energy is not a diamagnet, so it can exist. When it is, it becomes a diamagnet, which cannot exist, so it ceases to be. Then when the switch is thrown off it is no longer a diamagnet, so it can exist again. It is very upsetting and I am

much scrambled in my brains."

He stood up.

"I think that I need to talk of something else," he said, and now I realized that Santos was as much shaken as I was. "I am of a very select company, *amigo*. There was Galvani, and there was Faraday, and there have been a few others. Now I am one of them, because I have found a new principle of science. But it is not a comfortable discovery, to learn that two principles can flatly contradict each other and both be right."

I turned the switch off and on, and off and on. The complicated-seeming gadget was alternately present and solid and real, and completely absent and non-existent. It looked like a conjuring trick. But I remembered my hand floating in thin air, a good foot and a half farther from my elbow than it should have been. And I shivered.

THEN Luis Santos took my arm. He was a little man, as I said—barely above my shoulder. He was lean, and his face was wrinkled, and he had a nasty scar which began just above his collar and went down his neck out of sight.

He led me firmly toward the door and lunch. I went along almost dazedly. It may sound commonplace enough to hear about but, when something like that actually happens to you, it sets butterflies to crawling in your stomach.

I kept looking at my hand, which had apparently been separated from my body. I moved it feverishly, reassuring myself that it was still there. I began to try to explain to myself that it wasn't so—that it hadn't happened.

I wish it hadn't.

Thinking back, it still doesn't make sense. Santos was a Hondaguan, from the little Republic of Hondagua down below the Equator. He was Latin-American—pure Spanish as far as I could tell—and you don't expect Latin-Americans, somehow, to be scientists.

You think of them and of revolutions and politicians, and if you know a few of them you think of poetry and literary effusions and highly intellectual and not very meaty talk. But science, no. Facts seem to hamper most of them.

Even Santos had seemed less than constructive. I knew his work, of course, He seemed to take a fiendish delight in taking some new and solemnly announced discovery and repeating all the described experi-

ments with meticulous care, and then publishing a painstaking account of the results—which demolished the discovery. People cursed him. But if he said that a certain experiment, conducted in precisely this fashion, produced exactly that result—it was so. He had that much reputation, at least.

For the rest, without making any mystery about himself he was more or less obscure. He'd come to the United States, graduated from a very good technical school here, and gone back to Hondagua. Ten years later he'd turned up in New York, wrinkled and already dried up, and had set to work painstakingly to demolish the work of other men. Until now he'd never announced any original work of his own. What he'd done in the ten years he was back home, I didn't know. He never spoke of it.

He led me down to the dining room in the Institute, and we took seats at a table facing each other. We both looked as if we'd seen a ghost.

"First, we lunch," said Santos firmly. "We think about something else. I am afraid of that thing. So we will talk about other matters until we have had our coffee."

But I wasn't much good at talking, just then. I had seen a solid substance cease to be, and I had seen a quite impossible condition of space which hurt my eyes, and I'd passed my hand through it and my hand was separated by a good foot and a half from the rest of my arm, and seemed not to have noticed its own aberration. I looked at my fingers and moved them painstakingly. Of course nothing had happened to them but the impossible, but I couldn't talk.

"The situation seems to call for desperate measures," said Santos, smiling faintly. "Did I ever tell you about my home in Hondagua?"

It was the only subject outside of what I'd seen that I could really have listened to, because as I said, he was in a mild way a mystery. I knew he didn't like to talk about his home. But now he did. He knew we both needed to stop thinking of that preposterous gadget of copper and glass and wire up on his work-table. So since I couldn't help him, he helped me.

He gave me a picture of his home in Hondagua with crisp words that painted drooping palm-trees and a sky that was too blue for anybody to believe, and a sea that lapped against a shore of white sand. There was hot sunshine, and lazy comfort, and an infinitude of reasons for not doing anything

in particular and being quite happy about it. There was a white-walled, sprawling *hacienda*, with jasmine growing all about it, and barefooted Indian servants, and a roofed-over well.

"The water from that well, *amigo*, does not taste like water from a hydrant," said Santos parenthetically. "It is much superior. And there was a smiling dark-haired girl. . . ."

Santos stopped short.

After a moment he went on again. He was doing it for me, because I was not in a very good mental state and he wanted to distract me. You often read of fantastic scientific devices, in fiction. But when you actually see one, it hits hard!

CHAPTER II

Elastic Space

SANTOS talked about his horses, and his dogs, and the lazy drives into the sleepy, lazy town of Niente, and of the house in the capital city of Hondagua which sprawled over half a city block and had been added to by his forefathers until nobody on earth could ever have made a plan of it. And the ancient, creaking, unbelievably elaborate barouche in which it had been the custom of the ladies of his family to pay solemn, official calls for uncounted years. It was ridiculous, that barouche. Why, once the dark-haired girl—

He stopped, and sweated. Then he managed to smile.

"I think you are thinking of something else now, eh?" he asked. "I shall look at the paper for a moment."

Table service in the Institute restaurant is not swift. It is a tradition, together with the stodgy dinginess of the corridors. We waited to have our coffee brought us, and he picked up the newspaper that had been laid on our table. He began to glance at the headlines. His hands shook a little. He wasn't thinking of the paper. But his eyes must have taken in some of the print, because suddenly he trembled violently.

He laid down the paper. He was very pale indeed. He saw my expression. He smiled at me, but his eyes were very strange.

"I think we are both cured of thinking of that thing upstairs," he said quietly. "I see

in today's newspaper that the *Persidente* of Hondagua is to come to this city on a goodwill visit to the United States. That would cure me of thinking of anything!"

He picked up his coffee-cup. He hadn't noticed its arrival. He drank some of it, but some of it spilled, and his face looked thin and pale and desperate.

"Now I shall go back to thinking of my diamagnet with relief," he observed remotely. "It is much easier to bear."

But suddenly, as if he could not help it, he told me. His voice was savagely bitter. It hurt to hear him.

Hondagua was one of those nations which paid strictly lip-service to democracy. Its president—José Manuel Gutierrez—had been in office for eighteen years. During those eighteen years there had not been the pretense of an election. There had not been the pretense of justice in the courts or honesty in its officials. Worse, there had not been a pretense of decency on the part of the absolute and arbitrary *presidente*.

The dark-haired girl had been Santos' wife. She had attracted the attention of the saddle-colored Gutierrez. He'd blandly invited her to the Presidential palace. She did not go. She disappeared—kidnapped by members of the presidential guard.

"I was away, hunting," said Santos, thin-lipped. "When I heard, I went mad. I went to the palace with a revolver, and I was shot down on the ground that I had attempted to assassinate the *Persidente*. That was my intention, but I had no opportunity. I was left for dead, but I did not die." Then he added: "Unfortunately!"

He paused for a moment.

"My wife, also, was dead," he said evenly. "When I recovered, I began a revolution. There were enough of people who were as desperate as I! For three months we managed to keep the field. We did some damage, to people who undoubtedly hated Gutierrez as much as we did. But it was quite hopeless. We became hunted fugitives. Once they caught forty of my men alive, promising them their lives if they surrendered. I myself heard the volleys by which they were executed. I was hiding in a *peon's* house not half a mile away. Ultimately, just twelve of us got out of the country."

Then he spread out his hands, smiling bitterly.

"I planned to go back some day and strangle that Gutierrez with my own hands.

But already a thousand men had died in my revolt. And—my men did not always behave like Sunday-school scholars. If I could have been sure of killing him—that would have been one thing. But to cause the deaths of other men, and perhaps the shame of other women, to revenge the injuries I had received, that I could not manage. And as a result—" his eyes showed that he sneered at himself "—I have become a great man! I have made a diamagnet, *amigo mio*, I have made a thing which cannot exist and which ceases to be the instant its existence begins, while Gutierrez here visits as the president of a friendly nation!"

IT WAS now my turn to try to draw his mind away from what he was thinking about.

"You'll probably be sorry you told me that," I said bluntly. "So I'm going to forget it unless you mention it again. But that diamagnet isn't the trifle you think. If you'll go up to your lab again, I think we'll find out that it is important, after all, and well worth a man's life to find out. You completed it as recently as you say?"

"Half an hour before you came in," he told me without interest, "I turned it on for the first time, then. Very well. Let us go."

I went back to his laboratory with him. I talked enthusiastically of unstated suspicions I began to have of its capabilities and significance. I really got him to think of it again.

And again I wish I hadn't.

When we got to the lab, the first question, of course, was what became of the contraption when it was turned on and vanished.

We took a wooden rod and poked into the space it had occupied. There wasn't anything there but an extraordinary optical effect that told you something was wrong when you looked at it. The rod came out—surprisingly far—on the other side. Then I drew the rod bodily through the queer appearance, holding its two ends. It was the same thing I'd done with my arm.

The rod was about a yard long. I pulled it to me, and suddenly it pushed my hands apart. I hate to admit it, but the hair stood up on top of my head, because the rod was solid, and it was expanding violently.

Then I saw that there was an empty space in the middle. It looked as if there were two rods. But the two ends felt as if there were only one.

I continued to pull it toward me, and abruptly it shrank to its normal length and the open space in the middle vanished, and it was a single piece of wood again.

Santos fiddled with the scar on his neck. Suddenly he nodded his head.

"I think that that explains everything," he said coolly. "Look, *amigo!*"

He put the rod back through the queer optical condition. As seen from the side, the rod was a foot and a half longer than it had been, and there was an empty space a foot and a half wide in the middle. But when Santos pushed the rod to and fro the gap between the two sections remained the same, and in the same place, but the relative lengths of the two sections changed. Now there was one inch in the piece on the left-hand side, and now a foot, and now two, and now one inch again.

And then Santos pulled it slowly, and that one inch shrank to half and a quarter and a bare shred. . . . And he had the end of the stick out of the hazy place, a foot and a half from where it had been the fraction of a second before.

"Ah, yes!" said Santos. "And this will prove all of it."

He spread out a newspaper two sheets wide, and lowered it over the appearance. A hole appeared in the middle of the newspaper. It was not torn. It simply appeared, and the paper wrinkled and buckled on every side to make up for the hole. He raised the paper and the hole closed up flawlessly. He lowered it until an almost circular hole a foot and a half in diameter was in the middle.

"Turn off the switch," he said.

I did. There was one of the sharpest, nastiest snapping sounds you ever heard, and that ungodly copper-and-glass contrivance was sticking through the newspaper and there was a cloud of fine paper-dust sifting through the air.

"*Pero sí,*" said Santos calmly. "That is it. But of course. How could it be otherwise?"

He took out a cigarette and lighted it. He did not show any triumph or any pleasure in having found an explanation.

"You are right, *amigo mio,*" he said instead, in detached tones. "This is important. It is worth the Nobel Prize, at least. I have forgotten who remarked that this is a mad world, but it is so. Now I understand why I was afraid of this thing. It is the sort of thing to make one's hair prickle."

HE GRINNED at me mirthlessly.

"Perhaps I will become an eminent Hondaguan scientist, now. Guttierrez may give me the Order of Sansovino, First Class. He may invite me home. And he would express great grief if a deplorable accident caused my death within the hour of my landing. It is amusing."

But he did not look as if he were amused. "What the devil?" I demanded. "What happened then?"

He blew a cloud of smoke.

"The theory is simple. Two things cannot occupy the same space at the same time. They tried to. We speak of paramagnetic and diamagnetic substances as if there were magnetic and anti-magnetic fields of force. But we also speak of positive and negative electricity. Yet we know that there is no positive electricity, there is only a deficiency of electrons which are negative charges. So there is no anti-magnetism in space as we know it, but only a deficiency of magnetrons in certain substances like copper and bismuth."

"But you said—"

"That I made a diamagnet," said Santos. "And so I did. But it cannot exist in our space. Therefore, in order to exist, it must create a space which is different from ours, in which it can exist. And this it does. That much is clear, I think, from the experiments we made only now."

"Hold hard!" I protested. "You're suggesting that the thing goes into a sort of fourth dimension?"

"No," said Santos with an abrupt flagging of interest. "Into a closed universe. A tiny pocket-sized universe of its own. Exactly the same thing, say, as an atom so heavy that it collapses space upon itself. There would be no way to detect such an atom. But we can detect this thing, because the space which ceases to be is so large."

He sat down and fixed his eyes somberly on the opposite wall. I blinked. Then it began to make sense. There was a long silence in the barren-looking room which was Santos' laboratory. But I need to see things, sometimes, before they are firmly in my head.

So I went over to the table where Santos wrote up his notes and picked up a rubber band and a paper-clip. It was a red rubber band, I remember.

I slipped the paper-clip on it and stretched it between the thumb and forefinger of my

hand. Then—feeling very foolish—I made two ink-spots on the rubber. They were a couple of inches from each other, with the paper-clip in between.

The paper-clip represented the copper-glass-wire contrivance, and the ink-spots two arbitrary places on the table. Then I twisted the paper-clip so that it wound up the rubber band about itself. It stretched. The ink-spots approached each other. Presently they touched. Then I let go the paper-clip and everything slipped back. They were far apart again, with the clip in between.

That was it, exactly. Einstein has proved that space is elastic. The rubber band was also elastic. When the paper-clip—representing the weird object on the work-table—wrapped the rubber band which represented space about itself, why, presently there wasn't any rubber band or space between the two dots. But when I released it, everything went back to normal and there was space and a metal object between them.

The diamagnet wrapped space about itself. It absorbed space. The reason one's eyes hurt when looking at the place where space had been absorbed was that they tried to focus impossibly. Objects behind the vanished gadget were nearer than objects which weren't behind it. They hadn't moved, of course. But a certain amount of space—of distance—had been removed.

"This," I said presently, "means more than I pretended to think, Santos."

He shrugged. For years he had kept so busy that he could not remember his home in Hondagua, or his wife, or the tragedy which had made revolution and bloodshed when he fought bitterly for vengeance. Perhaps, especially, he had kept busy so he could not remember the failure of his vengeance. But the coming of the *Presidente* of Hondagua to New York upon a good-will visit—the one man in the world whose life was forfeit to him!

I FOUND a couple of test-tube holders in the dusty wall cupboard. I put them a couple of feet apart, with Santos' gadget in between. I threw the switch and the thing disappeared.

I got behind one of the holders and looked at the other one. It was only six inches away. A foot and a half of the distance between them had disappeared.

I moved to the side of the table—and they were two feet apart. But in a straight line

from one to the other, there was only six inches. Space had vanished between them, but not between anything else. The space between them had been rolled up and wrapped around Santos' invention.

I turned the switch off and everything was normal again. But I began to tremble.

"I say, Santos," I said quietly. "Does it occur to you that you are the richest man in the world? This thing is going to make railroads and bridges and steamer-lines look rather silly. It's going to make mines obsolete, and I suspect it will do things to the law of the conservation of energy. If you can make this confounded thing create its own pocket universes in reasonably obliging shapes, you're going to remake civilization!"

As I have said, he was rather small and quite dried-up and not at all impressive to look at. He looked pathetic, with his face all pinched with hatred of the man who was to be an honored guest of the nation and the city. He tried to listen to me. I think he really did. But all he could do was manage an artificial, apologetic smile.

"*Amigo mio*," he said listlessly, "I cannot think but so much of this matter now. Later, perhaps. At the moment it is necessary for me to consult with some of my friends. Not about this, but Gutierrez, now that he is away from his palace and his guards."

There wasn't even any excitement in his tone. There was hatred in it, though—hatred so terrible and so long-continued that it wasn't even emotional but was as natural and as inevitable and as implacable as the need to breathe. I didn't really see that then. I sympathized with him abstractedly, but my brain was on fire with the possibilities I saw in closed universes like the one his diamagnet would create.

I made him listen to me. I explained, urgently, some of the possibilities I could see. He might perhaps never have thought of any actual application of his discovery. I saw what it could do in a practical way. I made him see it too.

Now I wish I hadn't done that, either.

CHAPTER III

A Larger and Better Machine

NEXT morning the news headlines had nothing about the President of Honda-

gua. It hadn't been an important story, anyhow. It had been printed somewhere down on the bottom of Page One, and it was there because Hondagua had rated a good many headlines during the war because of its consistently pro-Axis policy. It had to be dragooned into breaking off relations with Germany, and it had been definitely halfhearted in ostensible efforts to clear the country of German spies. The news that its president was in the United States had a sardonic aspect that made it news for one edition.

I have a habit, though, of reading editorials. Perhaps because I deal in unarguable facts so much that I like opinions that are debatable. And there was an editorial in my paper on the visit of President Guttierrez. It referred to a communication in its letters-to-the-editor column.

That letter was signed by a Spanish name I did not know. It was written with the polished irony of a Spanish-speaking intellectual, and it was purest dynamite. It made points which bit. It pointed out that Guttierrez had seized power and suppressed all electoral privileges in Hondagua. It also mentioned that he had twelve times threatened war against the sister-republics around Hondagua. And then it added that the country was seething with revolt almost openly fostered by its neighbors for their own security.

The *Presidente* had left Hondagua—in fact had been able to leave it—only after elaborate negotiations with the surrounding countries and the elements opposing him. He had agreed to call elections and leave the country before they came off. His departure, in fact, had been in the nature of an abdication in the face of revolt and foreign war. He'd been allowed to get away simply to save the bloodshed he could have caused by resistance.

Newspaper articles in Havana, Bogota, and other Spanish-American cities were cited as verification. And then the letter pointed out that the private fortunes of many Axis leaders had been cached in Hondagua during the war, fortunes which those leaders would now never be able to claim.

It added that the baggage of the *Presidente* of Hondagua would, of course, be endowed with diplomatic immunity and passed through the customs without examination. Then it suggested delicately that the visit of the *Señor Don José Manuel Guttierrez* was not so much a gesture of good-will between sovereign nations as the getaway of a bandit with all the loot he had been able to steal or

inherit from enemies of the United Nations.

The editorial comment on the letter was on a high plane of impartiality, but the visit of the *Presidente* smelled to high heaven immediately.

I didn't go into Santos' laboratory until late in the afternoon. It had occurred to me that, after all, the discovery was Santos' and I hadn't any right to butt in on it. Yet, I couldn't think of very much else.

If you could diminish the distance between two test-tube holders by a foot and a half without moving either of them, you ought to be able to do innumerable things that by the normal laws of nature were impossible. After all, that's what civilization is—tricking physics to one's own will.

But this was more important than the harnessing of steam! It was more important than the use of electricity! It would rate, in future ages, at least equal with the invention of the wheel or even of writing. I foresaw a world remade and even the conquest of the stars!

It was Santos' discovery and only his, but—well—I managed to leave him alone until late afternoon. Then I couldn't stay away any longer. On the way to the Institute, feeling very foolish, I stopped in a toy store and bought some marbles.

He seemed glad to see me. He even looked reproachful.

"You were so enthusiastic yesterday, *amigo mio*, that I looked for you earlier," he said gently. "I need your viewpoint; your ingenuity. I have a peculiar turn of mind. To me, this seems fascinating because of its possible effect upon the history of thought. To you it means effects upon the history of civilization. That viewpoint is important. I should have it."

THE gadget of the day before was no longer on the table, but there were two or three odd contrivances in its place and he was assembling something else.

It was a strange place for the future of humanity to be formed in, I thought. Laboratories in the Institute are not luxurious. This was cramped, and the walls needed painting, and it was definitely untidy. And of course Santos was not the stately figure the moulders of civilization have always seemed to be. But—

"What have you done?" I asked feverishly. "I want to know if you can make those pocket universes of different shapes, or if they have

to be globular. Everything depends on that. Nearly everything, anyhow!"

He nodded toward the table. There was a cage-like thing which bore a definite family likeness to the apparatus that had almost driven me out of my mind the day before. This was about three inches in diameter and three feet long. Santos was working on something quite similar, but shorter and with a fair-sized empty space inside.

"That one," he told me, nodding at the three-foot object, "makes a cylindrical pocket universe. It is also a movable device. This morning I put a mouse in the space here—" he indicated the one he was working on "—and closed space about it. I released the little creature as a reward for surviving. I am making another change in it, but that is all I have done. I will show you the cylinder."

He put down the thing in his hands and went briskly to the work-table. He lifted the thing that looked rather like an over thick walking-cane made of lattice-work. There were thin glass rods included in it.

"See?" he said, well pleased. "I learned much from the original. I have been able to simplify. Now observe!"

He had a handle on it, with a switch. A wire ran to a power-socket. He turned the switch with a flick of his finger. The lattice walking-stick vanished, all but the handle. He passed his hand through the space where it had been. I had a horrible, sickening jolt when I saw the ends of his fingers seemingly jump three inches from the rest of his hand and then slip back into place unharmed. I knew what it was, of course. Along their length there wasn't any space between them. From the side there seemed to be.

"This, I think, is what you suggested yesterday," said Santos. "It is a cylinder of other-space. A closed space or a pocket universe which is cylindrical."

He turned the handle and that peculiar look of wrongness moved. He seemed to rest the end of it on the floor. I went over, and my heart came into my throat.

The wildest, wierdest of all my visions was quite true. The thing did absorb space. It was three feet long.

When you put one end at the level of the floor and looked lengthwise through it, where the thing was, the floor was *three feet nearer!* I put my finger on what appeared to be a three-inch disk of planking at waist-level.

It felt solid. It was. I was touching the

floor without bending over. I fumbled in my pocket and laid a coin on that seemingly—but not actually—upraised disk of planking.

Santos nodded, and turned off the switch.

Then the lattice-work cane was back in place, and down on the floor, without bouncing and without dropping, there was the coin. He turned the switch on again and I picked it up—without stooping—and broke out in a cold sweat.

"That's what I thought," I said shakily. "Lay that thing down sideways on your work-table. I—stopped and bought some marbles."

He laid it down, and I showed him what I meant. With trembling hands I set up a sort of trough of cardboard, bent into a V, pointing into the end of the lattice-work device.

He turned it on. I rolled a marble down the trough so that it would run into the extraordinary optical look of wrongness, at one end. The rolling marble reached the limit of the pocket universe—and rolled away from the other end of it!

It did not pass through the space in between, because *in that line* there wasn't any space in between! It had been rolled up and closed in upon itself. It simply wasn't any more.

INE by one, I let every one of the marbles roll down the trough, and one by one they appeared with the utmost nonchalance and the same momentum a yard down the table.

I took out my handkerchief and wiped my face. I was sweating. My teeth chattered.

"Suppose, instead of something three inches in diameter and three feet long," I said, "you make one of those things six feet in diameter and ten miles long! You put one end at Forty-second Street and the other up in Yonkers. You turn it on. It doesn't exist any longer. It doesn't block traffic. We walk right through where it was built. The space where it was has ceased to exist."

"And then suppose somebody walks into the Yonkers end of it? He steps with one step from Yonkers to Forty-second Street, because along that line and only along that line, there isn't any space in between! Suppose you build one of these things across the continent. It'd cause miracles!"

Santos looked at me and grinned. But it wasn't an excited grin. It was a sympathetic

grin. It was a pleased grin. He actually seemed to be thinking much more of my enthusiasm than of his own triumph.

"Ah, yes!" he said. "That is true. That is rapid transit carried to the point where there is no longer such a thing as speed. If all goes well, *amigo mio*, you shall have full conduct of such practical matters as making it possible to go instantly not only from Forty-second Street to Yonkers, but also to Weehauken and Kokomo. I shall stand back and admire."

"Even in time we'll be able to make it a step to Hondagua!" I said feverishly.

Then his grin froze. But he did not say a word. He simply went back to the alterations he was making on the pocket-universe generator in which he had put a mouse. His face looked peaked and bitter, just because I'd mentioned Hondagua, which reminded him of the Presidente. I'd put his mind back on his own past.

I wish I hadn't done that!

CHAPTER IV

Trouble for Gutierrez

THE President of Hondagua came to New York two days later, and he was news. It wasn't the regular sort of news, either, or the regular polite newspaper tributes to an admirable if small-sized good neighbor south of the Equator.

That first letter to the editor of my paper had started things. Such letters don't often mean much. This one pointed straight to a story. The other papers picked it up. And then they spread that story all over the New York front pages, and it went on from there.

One paper headlined its story, "Hondaguan Fuehrer in New York." The mildest of them called him "Dictator," which is a nasty word these days.

They had dug into the perfectly available facts about the administration of Hondagua, and they exposed the *Presidente* with beautiful clarity as a fascist, a grafter, a murderer and a cheap crook who had just sold out his followers at home in exchange for a getaway for himself and his loot.

A Senator got up in Congress and attacked the Administration for letting him enter the country, in spite of the fact that he was still

legally the chief executive of a friendly nation. There was a terrific row because his baggage had, by diplomatic courtesy, been allowed to enter the country without customs inspection.

Instead of a perfunctory account of his arrival and a non-enthusiastic story of his greeting by the Mayor, there was a corps of reporters and cameramen to meet him, there were pictures of him on every front page in town, and the stories were blistering.

He went to the Walderbilt Hotel, where a suite had been reserved for him and his attendants, and where the Hondaguan flag was promptly hung out with due ritual to indicate his presence. And the story didn't die there. The papers kept leg-men on the job and every detail of his activities splashed the front page.

He was an inordinately fat man, swarthy, with the worst hard-boiled look I've ever seen in a half-tone picture. He posed in uniform and a saber, with vast dignity, for the press photographers. Apparently he couldn't read English and none of his attendants dared tell him what was being printed about him. His attendants were a motley crew, themselves.

The afternoon papers described in detail the row in the service section of the Walderbilt when some of his uniformed attendants insisted on remaining with his baggage every minute and even riding up in the service elevators with it. There were pictures. One photographer had irritated such a guard to the point where his picture was snapped with his hand on the revolver in his holster and a menacing scowl on his face.

Next morning the morning papers carried the story of another row. The *Presidente* had ordered feminine entertainers sent up to his suite for what was apparently to have been a party. They didn't appear and he raised Cain. But then somebody apparently got nerve enough to tell him what the papers were saying, and he shut up like a clam. He passed twenty-four hours in his suite without once peeping out of it or making a single request for service that the newspapers could use.

But they didn't let up on him. They republished pictures of the armed guard over his baggage. They made estimates of the amount of money and loot the Nazis had sent to Hondagua, and they credited him with having stolen all of it.

Then they estimated the amount of money he had managed to extort in his own country

while ruling it, and they asked if that many millions of dollars had been brought in under the cloak of diplomatic immunity, and would he be allowed to get away with it.

The election which was to choose his successor hadn't yet been held, but it was reported that Hondagua was a madhouse. There was already a provisional government in power which ignored Guttierrez's legal status, and every boat leaving the country was packed, and every packtrail out of the nation crowded, with former followers of the *Presidente* trying to get away from retribution.

I WENT into Santos' laboratory, bringing him some stuff he'd asked me to get. I found six other Latin-Americans sitting in there listening as he talked to them in Spanish. They turned poker-faces to me when I came in, but Santos introduced me—all Spanish names like Calderon and Ybarra and so on—and they relaxed. Then he explained expansively to me.

"These are my old friends and comrades in arms, *amigo*," he said. "We had lost touch, but the coming of Guttierrez to New York made us seek each other out. Now, with the storm of newspaper comment, we have decided that something must happen to him. The American Government will surely take away his wealth. Probably he will be arrested and extradited to Hondagua as a common criminal. I would like to be there when the mob gets hold of him!"

The faces of the other six went studiously expressionless. I wouldn't like anybody to hate me that much!

"We met here for political debate," Santos went on with evident pleasure. "I invited them also to witness a demonstration of my discovery. I fear that they look upon it as conjuring, but it pleases me to show off first to my countrymen."

I put down the stuff I'd brought—mainly a lot of those small storage B-batteries they used to use in portable radios. They're hard to find, nowadays. And Santos staged his show.

He went through all the stuff I'd seen, and then he pulled a new one. He'd evidently put aside the small contrivance I'd last seen him working on, and he'd made a gadget—a diamagnet or whatever it ought to be called—a thing that closed space around itself in a pocket universe when it was turned on—that was extendible. It worked somewhat like a pantograph arm. It closed up to

about three feet in length, but he could expand it to quite five times that length. And at all lengths it wrapped space around itself and ceased to exist in our universe. As he showed us.

"I am almost ashamed of this," he told me apologetically. "It is a device which a burglar would be delighted to own."

He turned on the switch and the thing vanished. In its stead there was that odd appearance of wrongness which I've explained, but can't possibly make you really imagine. And he worked the control on the handle, and it stretched out and thinned. It reached all the way across the laboratory.

Then he put his hand into one end of it and—of course—it came out on the other side of the room and picked something up. He showed it where he stood and put it in his pocket. Then he grinned at his companions—they had a hard time looking poker-faced—and he pointed it at the floor. It went through the floor as the first one had gone through the newspaper without tearing it, and he brought up something from the laboratory downstairs, and then put it back. Finally he pointed the slender rod of nothing at an electric-light bulb, and he put a quarter in it. This done, he turned off the switch.

When you think of it, putting that quarter inside an unbroken electric-light bulb was, all by itself, enough to make you hold your head in your hands and groan. But Santos' friends chuckled. They slapped each other on the back. They roared with laughter. Santos looked at them with a queer tight grin on his face and his eyes shining.

Abruptly they filed out and Santos turned to me.

"I know that you think it was childish, but they are my old comrades," he said apologetically. "They have as much to forget about this Guttierrez as I have. To make them amused, even for a little while, is worth much."

I didn't say anything. I pointed to the parcel I had brought—to the small-sized storage B-batteries out of the kind of portable radio that isn't made any more.

"I got the batteries you wanted," I told him. Then I said urgently: "Listen, Santos! I can get hold of some people to see a demonstration of that thing when you're willing to show it, but first you've got to get at least a patent application in. Do that, and I'll guarantee that there'll be all the money you need to start using it."

SANTOS looked at me, and there was reserve in his manner.

"Bueno! But tell me what use you will put it to."

"For one thing, there'll be no slums," I said earnestly. "People live in crowded places so they can get to and from their work. With this discovery of yours, distance simply hasn't any more meaning. There won't be any more subways. There won't be any more of the nastiness that just having to live near this place or that now makes inevitable.

"For another, there'll be no more mines. You can push one of these things down to a vein of ore just as easily as you pushed it down into Dobson's laboratory below you, and the ore will be just the same as at the surface. Mining can be done cleanly, in the sunlight.

"There won't be any more hatreds between nations when it is possible for anybody in the world to step through a doorway and for an afternoon see that the people in other countries are the same sort of people he is. And I think that there won't be many degraded, graft-ridden governments when people can see that they aren't necessary. That's part of it, but there's a lot more. There's—"

Santos' face broke out into a genuine smile, and his eyes were warm and friendly.

"Bueno, that is enough!" he said. He shook hands with me, impulsively. "You are *muy amigo mio*. You shall see to all of that! But there is a little thing first, just one little thing, and then I will place myself in your hands. You brought the little batteries. Excellent! I would not have known where to seek them."

He seemed astonished and pleased that I had found exactly the sort of batteries he needed. They're hard to find. They're away out of date.

But if you want to know, of all the mistakes I made in the whole affair, finding those storage B-batteries is the one I'm sorriest for. If I hadn't done that, all might yet be well.

Santos vanished for eight days. He didn't go to the Institute or his laboratory. I didn't know where he lived, but I managed to find out and went there. His landlady told me that he had packed his bags and had departed on a short trip. He had told her he'd be gone a week.

He'd ridden off in a cab all by himself, and she was holding his mail against when he came back. I scribbled a note, saying:

I'm sweating blood, wondering if you're going to be run over by a truck. Call me when you get

back. You're pretty important for the sort of world I want to see."

I signed it and left the note with her.

But it was eight days before he telephoned me. And in those eight days I had one long-continued case of jitters.

You remember the newspapers? You know what a holiday they had with the Presidente of Hondagua? And you probably remember the ending,—according to the newspapers.

They had it very nearly right until the very end, but you'll be able to fill in what they missed from what I've already told you.

The tumult and the shouting about Guttierrez grew louder and more specific. Planes had put correspondents down in Hondagua in a hurry, and for the first time in eighteen years people dared to tell the truth. It had been the tightest totalitarian government in the world outside of Hitler's, minus the party line.

There wasn't any party line. There weren't any principles the gang that ran the country even pretended to believe in. They'd had that country under their thumb, and they'd pinched it. They'd milked it. They'd almost literally bled it white.

The stuff that came out of the capital city would make your hair curl. And it became so clearly evident that Guttierrez had made a deal to save his own skin and loot, and it looked so much like his carefully-guarded baggage contained not only his own loot but Nazi money too, that the newspapers began to howl to high heaven that his diplomatic immunity ought to be scrapped and his baggage looked into.

Then a prominent firm of Latin-American bankers announced that a very large sum, running into many millions of dollars, had been placed in their hands as a trust, to be used for the benefit of the people and the nation of Hondagua.

There was a moment's pause, and then a renewed howl. So Guttierrez was trying to turn back part of his loot to beg off, eh?

The New York newspapers—always delighted with a scandal which did not hit the home town—sounded off. Then the Latin-American bankers issued a dignified statement that the money was not put into their hands by Guttierrez, but by a committee of former Hondaguans who had been Guttierrez's bitterest enemies and were political exiles from that country.

Then the works really blew up. The President of Hondagua apparently went out of his

head, in his suite in the Walderbilt. The management heard shooting, and the members of his train popped out of every door and ran like rabbits. They were scared!

Gutierrez bellowed hoarsely that he had been robbed. He marched out into the corridors of the hotel with a revolver in each hand, frothing at the mouth and hunting for those who had robbed him.

CHAPTER V

Santos Evens the Score

AMERICAN detectives finally got to Gutierrez, who panting and purple with rage, swore that his luggage had been looted in his own suite and by his own followers. He was a hard-boiled egg, and no mistake. He actually and literally foamed at the mouth.

His baggage had arrived and it was intact. He had made sure of that himself. Somebody had stood guard over it day and night—two men at a time, because he didn't trust any one person too much. Those who came off guard were searched in his presence.

But he had been robbed of every peso he had brought with him, and he bellowed that he had brought—well—so many millions that nobody believed it until it was pointed out that the sum just passed on to be spent for Hondaguan progress happened to be exactly that same amount. But the firm of Latin-American bankers simply said sedately that it was an interesting coincidence, but no comment could be made.

Gutierrez wasn't through, though. He was ruined, discredited, penniless, and disgraced. But he wanted to get even. He demanded that the police and the FBI find out who had robbed him and turn them over to him for punishment.

The FBI politely consented to examine his luggage for clues, and there was another pay-off.

Gutierrez had looked into every emptied trunk and strong-box. Of course! But when the FBI examined them they found confidential papers that Gutierrez would definitely not have wanted them to see. What they didn't prove was not worth proving.

For one thing, they put the works beautifully on certain persons—not originally from

Hondagua—who had tried valiantly to defend Gutierrez from what they called a "smear attack" in the newspapers. The FBI was very, very much interested. But it was polite to Gutierrez.

It left him in his suite with a guard of American police to assure that he would not be molested. The guard also made sure that he would not go out by himself or, in fact, that he would not go out at all.

With that guard at the door, the next day Gutierrez was found dead. Very dead. Conclusively dead. Nobody had heard any loud noise, but Gutierrez was a horrifying corpse because his expression screwed into an appalling grimace of superstitious terror. He hadn't died of fright, though. He'd been killed, by somebody who had made quite sure.

All this took a week to happen. On the eighth day Santos phoned me. I took a cab and went streaking to his laboratory. His expression had changed. It was somehow relaxed and infinitely calm now. It was so calm I stared in surprise. He grinned at me.

"*Hola, muy amigo mio!*" he said cheerfully. "*Que hay?*"

I swallowed. All of a sudden I knew the truth. I sat down, feeling sickish.

"You've been talking so much Spanish lately that you forget I don't understand it," I faltered. "Do you feel better now?"

He nodded. He watched me alertly.

"No," I said bitterly. "I'm not going to tell the police. Why should I? He rated it, Gutierrez did. But you took the devil of a chance! You could have been killed. Do you realize that you're the only man in the world who knows how to make a diamagnet?"

"And that is important?" asked Santos gravely.

"It's mighty important!" I said bitterly. "You've no right to risk your life."

"There was no risk," he assured me. "The American wife of one of my friends rented the suite two floors below his. The one above or the one below might have seemed suspicious, but two floors below—that was safe."

"You've had your fling," I said angrily. "You used that extensible contrivance, and made a pocket universe that reached from the inside of his baggage to where you were. You absorbed the space between. And you looted his luggage from the inside, took the proceeds and put them in a fund to be used for the progress of Hondagua. Incidentally, the people of Hondagua make a profit, be-

cause a lot of that money was originally German."

"It is not profit," said Santos. "It means such things as schools and doctors and honesty, which they should have had a long time ago."

MY EXPRESSION must have told him how much I knew.

"And somewhere among his possessions, there was a lot of incriminating stuff, which you took with the loot," I insisted. "After he'd found everything was gone, you put it back for the FBI to find."

"But naturally," said Santos in tranquil tones. "It exposed other villains. I do not like scoundrels."

"So you fight them," I said, "with the technic of a super-burglar!"

I did not say anything about the killing of Guttierrez. That wasn't my business. But I could understand the expression of appalling, superstitious horror his dead face had worn. He'd seen materialize before him in thin air the faces of men he'd wronged and whom he'd believed dead. And they'd talked to him before he died.

"You used the technic of a super-burglar," I repeated bitterly. "You risked the most valuable life in the world!"

His grin was wryly affectionate. He was a dried-up little runt of a Latin-American, but I liked Santos, and he knew it.

"I am rebuked," he said ruefully. "Your viewpoint is not mine, *amigo*. You think of people you do not know and who would probably bore you to death. I think of—the things that seem important to me. But your viewpoint is sound."

He seemed to debate a little.

"I plan one additional experiment," he said presently, "I must make it before I prepare to publish my discovery and apply for what patents you shall advise me to ask. I am sure it is perfectly safe. I have proved it. But I will take most elaborate precautions."

"What the devil are you going to do now?" I asked hotly.

He told me and I raged. But he grinned at me as I stormed up and down his laboratory, reminding him that he was a man and not a mouse, and calling him a traitor to the future. But he grinned on and repeated that he would take precautions. The most elaborate ones.

Next morning, early, I got a note from him:

Amigo mio:

To spare you worry, I am making my experiment tonight. As you know, I plan to enclose myself in one of the areas of space which becomes a closed universe when its diamagnet is turned on.

For the purpose I have made a diamagnet large enough to contain me in its field, and I shall energize it with the storage-batteries you procured for me. I shall have the switch inside, and turn it on, and then immediately turn it off again. Nothing can possibly happen to harm me.

I enclosed a mouse so, and it was not harmed or even disturbed by the experience, though I left it in the closed universe as long as I thought the air would suffice it.

But I am taking other precautions. I have written out a complete account of the theory of the diamagnet, and exact instructions for manufacture. I would leave it in a desk drawer, but you would reproach me.

So I have placed it in the small universe-generator I made for the mouse experiment. I place a single tiny storage-battery with it, and a clock will turn off the current at precisely noon tomorrow. I have made a practical device which even you did not think of! A truly burglar-proof safe!

If I am not in my laboratory when you arrive, you will be able to find how to duplicate all my results at noon. But I shall be there, and we will have lunch together.

As the greatest of possible precautions, and so you may not reproach me for carelessness, the two remaining smaller diamagnets—including the one for burglary—will go into the enclosed space with me for one-half of a second.

And because you might be absurd about it, I especially enjoin you to proceed to bring about the happier world you envision if the unthinkable should occur and disaster befall me. But actually, I shall be waiting for you for lunch.

Tuyo atto. y affm. amigo!

I went to the laboratory. I don't know exactly why, but I was in a cold sweat all the way. And Santos wasn't there.

There was a big space, over by the work-table, that somehow looked wrong any way you looked at it. It was big enough for Santos to be in. The stand which held the contrivance upright when it was turned off was visible underneath, like the handle of his portable gadgets, and like the wires which had led into the first one of all.

But Santos hadn't turned it off. If he'd used a plug to a power outlet, I could have cut it off myself. But he'd used the storage batteries. There wasn't any way to get into it. There isn't any way to get in. He's in a closed universe. A pocket-sized closed universe, to be sure, but nevertheless a tight one.

FOR the rest of it, there was the little thing he'd made for his mouse experiment. That was on its stand, too, and that

hasn't turned off either.

I stayed in the laboratory all that day and night and the next day, waiting for one or the other to turn off. Neither one has. That's been three months ago,—and no tiny storage-battery, constantly working, would hold a charge for three months! It would have exhausted itself, normally.

Of course the two things themselves are perfectly demonstrable pocket universes. You can do with them every experiment we first tried on the very first diamagnet of all.

Sooner or later, if neither one turns off, I'll explain what I can and prove what I say by them, and they'll be put in museums and taken care of and studied and so on. But I feel rather sick.

You see, the people of Hondagua have a lot of money that's going to be spent for them by people who want it to do some good, and it's a small country, and there are enough millions for it to make a big difference.

But there's Santos! Hang it, I liked the man! And until he comes out of that pocket

universe, nobody will get any benefit from his discovery! But there's no way in the world to speed up the turning of that switch. . . .

He'll come out, all right. He only expected to stay in there for half a second, and he's been in there three months, and of course he took no provisions and also of course there's been no fresh supply of air. But he'll come out. That battery on the little diamagnet couldn't have an atom of power by this time, but it's still on and it's been on for three months.

So I don't think the clock has stopped or that Santos is dead.

They're in little closed spaces, little pocket universes, which are strictly their own. And we don't know any of the constants of such small closed universes.

For instance, so far as Santos is concerned, we don't know how many months or years or centuries in the time of this universe will have to pass, before a half-second has gone by in that.



FAR IN THE FUTURE, THE SECRET OF THE POCKET
UNIVERSES IS REDISCOVERED BY MAN WHEN
DOOM THREATENS THE GALAXY

in

THE END

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"I'll fight," Dave promised. "I'll stop all this."

THE LITTLE THINGS

By HENRY KUTTNER

Dave Tenning, a born rebel, felt that he did not really belong in this Futureworld which was tired of rebellion!

THE first thing he did when he felt free from pursuit was to head for a news-stand. He wanted to know the date. He didn't know how long he'd been in the Chateau D'If, because after the first year or so there wasn't much point in keeping track.

There simply wasn't any way of escaping. Edmond Dantes had got out of the original D'If, but such a trick wouldn't work twice. When the—guests—died in this particular guest house there was a quick cremation in the basement somewhere.

That was one of the distressing sparse scraps of information he had managed to pick up during his period of imprisonment. Not once, in that long time, had he left the windowless single room with its nearly luxurious furnishings and completely luxurious Siamese cat, Shan, who had kept him from utter loneliness.

It had been a wrench to leave Shan, but her devotion was given to things, not people, and it had been no imprisonment for her. The miracle that had enabled him to escape

was not one that could be extended indefinitely. He took the chance when it came, and got out while the after-rumbles of the explosion were still sounding from below.

He didn't know what it was but the science of the big boys who ran the place was slightly super.

He got out in a sack that was piled with a dozen others on an elevator platform, and after that, for a while, he depended on his senses of touch and hearing for orientation. He didn't learn much. But he had an idea that the sacks were dealt with by automatic machinery.

The helicopter had automatic controls, anyway—as he discovered after getting out of the sack. He had a bad moment or two mastering the enormously simplified gadgets. Copters had been mighty complicated in 1945, and he was inclined to make too difficult a job of it.

The panel exploded into lights and yelps before he grounded. So that must have been the tip-off. They'd be after him now, the big boys who'd kept him in D'Iff for years. Oh, very comfortably. He was in perfect physical condition. Special lamps and treatments took care of him physically and mentally. A television gave him education and entertainment. There were books.

But he never saw or read anything released later than June, 1945. Maybe that was why worry hadn't eaten into his brain and nerves. He didn't feel quite so much left out of things. He knew, of course, that the world was moving on, but he didn't see it move. That helped.

The copter grounded in a ploughed field. It was night, but there was a full moon. Silhouettes against a dim glow told him that there was a city not too far away. The airship shot up and went away. It had no lights, and was swiftly lost as it kept going up, apparently heading for the stratosphere.

He took several deep breaths. Then he felt nonexistent eyes on him; the skin of his back contracted—and he knew that he was fugitive.

It was different, but it wasn't so different. The basics were still there. There were people, and the styles in clothing hadn't changed too much. He wore a duplicate of the same suit he'd had on in 1945, that June day when they'd come for him, the big boys. The big boys who'd sat outside and waited, their faces hidden, while their strong-arm men—appropriated—Tenning.

'I am Dave Tenning,' he thought, and there was a little shock of novelty. He had got out of the habit of thinking of himself in any personal sense. In fact, the calm, confident realization of personal identity had gradually vanished during the term of his imprisonment. Like a baby, he had become almost

unconscious of ego. There had been no need for its assertion.

'I am Dave Tenning, but there is another Dave Tenning.'

That was where reality left off and the terror began. It had never seemed quite real till now, the knowledge that an *alter ego* was walking in the outside world. Because there hadn't been any outside world, really, after a while—it moved away from him in time, and the people in it, even those he had known intimately, were less real than the sensuous detachment of Siamese Shan.

HIS clothes were all right. Nobody stared at him. He hadn't any money, of course, and that was a handicap, but not an insurmountable one. The boys at the *Star* would stake him. But he must be careful not to encounter the pseudo Dave Tenning, until he was ready. Maybe he'd need a gun. These doppelgangers could be killed. They always died when their originals did.

That was why the originals were kept alive, and in good physical and mental shape. There was some vital bond, something psychic, a dynamo of life-force in the Original that kept the Carbon Copy going by induction. He'd theorized in that direction, anyhow, and it checked pretty well.

But he felt funny, because this wasn't his world any more. He kept thinking that the men and women who passed him would stop and glance and then there'd be an outcry—just what he didn't know, except that he didn't belong here. In 1945 he'd belonged, all right.

He knew why they'd snatched him, too. A gossip columnist has potentialities of power. They wanted men—doppelgangers—in key places. They had a lot of them, undoubtedly. 1945 had been a crucial year. It was one of the few times when Pandora's box had been opened, when *too much* was available to a wide-eyed civilization.

Germany was on her knees, Japan going down, and the post-war world had been a bogey. Not because there was so much to do, but because there were so very many ways of doing it. It wasn't Pandora's box—it was a grab-bag.

The social problems were far tougher than technological ones, because the human basics remained unaltered, and people don't change as fast as things. You could have planned on a dehydrated chicken in every pot, but the change-over, the conversion of the social setup was another matter.

It didn't look as though much had changed—not really.

He even recognized places. There were some new buildings, though not many. The automobiles had a different design, without streamlining, were more pleasing to the eye.

Buses without drivers moved close to the curb and stopped at intervals. The lamp-posts gave a different sort of light. Shop-windows showed clothes, sporting goods, liquors, toys, nothing radically different.

But it was the small changes that made the city alien to Tenning. He didn't belong. Also, he knew that somewhere was another Dave Tenning, who had supplanted him, and that realization partially erased his consciousness of ego.

He had a momentary, unlikely sense of guilt—as though he had interfered with the rightness of the plan by escaping from D'If. *You're a stranger*, the people said as they went by without looking at him. *You're a stranger*.

'Stranger, hardly. I lived eight years in this town. I came here from a New York rag, and people read my column. So it wasn't Winchell or Pyle or Dan Walker. I never pretended to be anything more than a second-string columnist. I was read at breakfast, over the coffee, and people got a bang out of the muck I raked.

I'm Dave Tenning, and for years or centuries I've been locked up in a comfortable little prison with a Shangri-La library and a cat named Shan who didn't give a hoot about anything except a cat named Shan. The ghost walks. Just where he's bound I don't know, but he's looking for some threads to pick up. The date, for example.'

The newsstand had regular papers and it also had small, thick disks of plastic or glazed cardboard. Tenning stopped to stare. The date—

Fish decem 7. And so what?

"Paper, mister?" the man in the booth said. "Sheet or roto?"

"Look," Tenning said. "What's the date?" "Decem."

He wanted to ask another question, but he didn't. He turned and went on, wondering about *Seven*. Year *Seven*? Not *Anno Domini*. So?

The little things, like this, would be the hardest to pick up. People don't change, they just grow older. But fads and gadgets and trivia alter fast, even to the point of becoming unrecognizable. And he still didn't know what year it was.

The heck with it. This was Gardner Street, and he knew where the *Star* building was. He hopped one of the robot buses when it stopped and wanted a cigarette. He was inactive for the first time since his escape, but his nerves weren't.

Nobody in the bus was smoking. He hadn't seen anybody smoking.

The *Star* building was still there, big, old and, surprisingly, dark. The electric banner on the roof was gone. Tenning walked up the steps and rattled the ancient doors. They

were locked. He stood, hesitating.

This time he was really scared. A chased fox goes to earth, but if he finds his burrow blocked up, that's bad. Tenning automatically reached into his pockets, one after another. They were all empty.

A HEAVY-SET man strolling along the street paused to look up at him. Diamond-points of light showed under overhanging brows.

"That place closes at tilth," the man said.

Tenning glanced back at the locked doors.

"When?"

"Tilth."

"It—does?"

"Government offices," the man said, shrugging. "They run by schedule. No use trying to get in. Not till fen in the morning, anyway."

Tenning came down the steps.

"I thought this was the *Star* building."

"No," the assured, quiet voice said. "Not any more. We thought you'd come here, though."

Tenning's poised, singing nerves went *wham*. His fist made a similar sound as it hit the man's jaw, and Tenning followed up that one good blow with several others. He struck with panic and hysteria. The sound of alarmed voices made him realize that his opponent was down, and that figures were closing in.

He knew the streets and alleys and got away easily. That relieved him a bit. His pursuers were simply casuals. If they'd been men from D'If, he wouldn't have escaped without a lot more trouble.

So they knew, and they were on his track. Fine. He wanted a gun. He wanted a big bludgeon with spikes in it. He wanted poison gas and block-busters and flame-throwers. Most of all he wanted a hideout.

It was the familiarity of the city that was dangerous. The little things were different, and they were the ones that could betray him. He might find himself taking too much for granted, because this alley he was in looked just like the Poplar Way he used to know, and as he walked along, a paving-stone might suddenly fly away with him and take him back to D'If and the cat.

He went down to Skid Row, and that hadn't changed. The people had. He didn't know any of them. Maybe, in a different social set-up, different people would be hanging on the ropes. But was this another set-up?

There was a cheesy sort of beer-garden in back, and he went there and wondered about things. Customers were paying for their drinks with tokens of some sort. Under a bedraggled potted tree a girl was sitting alone at a table, nursing a highball.

They looked at each other. The waiter ap-

peared, and Tenning hastily got up and went to the telephone booth. But it held gadgets and no directory, so he came out again and stood helplessly hesitating.

He went over to the girl. She looked lost, too.

"Look," Tenning said, "can I sit down?"

"Never . . . works out," she said. "I can't keep up with it. You're not the man, you know."

She was drunk, plenty drunk. But she held it well and managed to look pretty.

"Sit down," she said after a while. "Are you lost too?"

"Yeah. Lost and broke. I want a nickel to make a phone call."

Her blue eyes went wide. She laughed, not pleasantly. And she called the waiter.

"Two highballs."

Tenning waited. The drink tasted good, but it lacked schmaltz. Non-intoxicating alcohol, he theorized.

"What about it?" he asked. "Thanks for the drink. But what I really want—"

"You can't make a phone call that far back," she said, and Tenning's spine jammed itself together and felt cold. His fingers tightened on the glass. He said gently,

"What do you mean?"

"I miss it too. I grew up in the wrong time. Some people just can't adjust. We're a couple of them. I'm Mary. You?"

"Dave," he said, waiting for a reaction. But there was none.

She didn't know, then. How could she? The whole world wasn't spying on him. The whole world wasn't in league with D'If. That cat strolling across the bricks wasn't really in telepathic touch with Shan, reporting the whereabouts of the escaped prisoner.

"Why can't you make a phone call?" he asked.

"It wouldn't be worth it. Building phones just for people like us. We'll die, Dave. We can't propagate. They don't try to harm us, because we're not in the way. If you don't fit in—okay. Get drunk and think about Andy. You don't know Andy."

"Who—"

She laughed.

"He died, and I didn't. Or vice versa. I've never seen you around here before."

"I've been—out of town. For a long time."

"I never bothered to go."

"The telephone—"

"You know how they work nowadays," she said, "and what they call 'em."

Tenning was looking at a clock, high on the wall. He couldn't make much of the numerals. They weren't numerals. They were arbitrary signs.

"Sela plus," Mary said, "so we've plenty of time. Andy won't come. I told you he was dead."

THE little things are important. They made up their own dates, their own hour-names. Why? So people would be just a bit unsure, perhaps. Or, maybe, because time-names were a common denominator, and by changing those, the people were gradually turned into a different path.

There would be no sudden, tremendous metamorphosis. Tall cities would not spring skyward overnight. Ships would not fly to the planets. Because people change more slowly than things. Chaos and revolution follow renaissance. If the people have power.

In 1945 there had been power to waste. There had been a hundred plans for rebuilding a new world. And each had its own backers, many of them fanatical.

Harding was elected because he promised *normalcy*. After war, men were tired. They wanted to crawl back into a 1912 womb. They didn't want experiments that might upset their lives further.

Even before Japan went down, the road to the future was clear—a hundred plans, and a hundred fanatics. And weapons of power. If one plan had been chosen, there would have been opposition, and deadly danger to civilization. Because, by 1945, technology had developed weapons that were too perilous to be used—except by fanatics.

On one point everyone agreed—the Harding platform. Pre-war security. The good old way of life. It was easy to turn propaganda in that direction. Men wanted to rest.

So they rested, and Utopia did not come. But there were signs.

Streamlining was not functional for surface vehicles. It wasn't used.

Alcoholic drinks were, after a while, intoxicating, but without toxic effects.

Fish decem 7.

Sela plus.

But in the open—nothing. People were contented and secure. They had their old, safe way of life. Perhaps subconsciously they were being conditioned otherwise. They took it for granted now that this was Fish decem 7.

A few misfits, who couldn't get used to the psych-phones—

He'd been a reporter, so he picked the scoop out of Mary after a while. It took quite a few drinks. And he had to keep turning the subject away from Andy, who was dead, but who used to do a lot of things in the old days, when telephones were still used.

"People are different," Mary said. "It's like . . . I don't know. They've got something on their minds. But I don't know what it is. I remember in school everybody was tremendously excited one time about beating Tech High in the big game."

"I didn't care. But everybody else did. There was a sort of undercurrent. They were all working for that, deep inside of them, and

I couldn't see it. Suppose we didn't win? What about it?"

"Antisocial," Tenning said.

"There's something in the air now. Everybody's working to beat Tech High. Except me, and—" She made a gesture. "People like us aren't even in the way."

"I used to work on the *Star*," he said. "It moved, didn't it?"

"All the papers moved, of course. They're published from somewhere. Only nobody knows where."

"Do you—read the *Star*?"

"I don't want to read anything."

"I was thinking about a columnist . . . Tenning."

She shrugged.

"I know about him. He isn't with the *Star* now. He spotcasts."

"That's . . . a radio—"

"Not any more. Tenning's a hot shot now, Dave. Everybody listens to him."

"What does he talk about?"

"Gossip. And politics. People listen—"

YEAH, people listen to that dirty ringer, and he moulds public opinion. He moulds it the way the big boys want. That's why they grabbed me in nineteen forty-five. I wasn't at the top then, but I had the public ear. I was getting good audience reactions. *Spotting key men to work out their plan for them—*

Ringers, doppelgangers, in the right places. Painless psychology, sugar-coated propaganda. And a world moving, leaving Dave Tenning behind, a simply immense sphere beginning to turn from its course, gathering momentum as a thousand doppelgangers shoved it along.

Okay. Maybe the plan itself was good. But Dave Tenning had been the prisoner of Chillon for a long time.

"I've got friends—or I used to have 'em," he said. "Mary, how can I get in touch with a guy named Pelham?"

"I don't know."

"Royce Pelham. He used to publish the *Star*."

"Have another drink."

"This is important."

She stood up.

"Okay, Dave. I'll fix it."

And she went to the psych-phone booth. Tenning sat and waited.

It was a warm night. His glass, cooled by induction, felt pleasant in his palm. A Skid Row beer-garden, smelly, not too clean, with moribund potted trees looking dissipated in the moonlight.

Welcome home, Dave Tenning. Welcome back to life. No brass band, but so what? The brass band is out serenading Dave Tenning II. The pseudo-man who made good.

Offbeat music swung crazy, boogie rhythms somewhere, hitting the blue chord hard.

Mary reappeared, looking pale.

"I kept thinking of Andy," she said, "before he died. He got to liking those psychophones. I never can get to."

After 1945, did people really want the old-style life? Or was the social growth, the evolutionary trend, still stirring? The superficialities came back. But people seemed to like new things—if they weren't too new, if they didn't seem to point the way to Change. Before a baby can run, it must be taught to walk, its fears overcome.

"Pelham?" Tenning said.

"Wela tee Carib Street."

"How—how do I get there?"

She told him. He still looked baffled. Mary finished her drink.

"Oh, I'll show you. It's something to do. But we'll come back here later."

They caught a bus—no fares were collected—and finally got to a comfortable, old-fashioned house in the suburbs. Mary said she'd wait in the corner drug-store and drink a chang. Tenning was wondering about the color of a chang as he rang the bell.

Old Pelham himself opened the door. He was smaller, a trifle shrunken, and completely bald now. His heavy face, seamed in folds, was inquiring.

"So?"

"Royce. You know me, don't you?"

"No," Royce Pelham said. "Should I?"

"I don't know how long it's been, but . . . Tenning. Dave Tenning. *The Star*. Nineteen forty-five."

"A friend of Tenning?" Pelham asked.

"I've got to talk to you. If I can explain—"

"All right. Come in. I'm alone tonight, the kids are out. Now."

So they sat in a comfortable room with furniture that was mostly old, but had a few new and disquieting things, like the shining, moving, singing crystal on its pedestal in a corner. Pelham was courteous. He sat and listened. Tenning told it all, what he'd experienced, what he'd doped out, the whole works.

"But you're not Tenning," Pelham said.

"I told you he's a double."

"You don't look like Tenning."

"I'm older."

"You never were Tenning," Pelham said, and gestured. Part of the wall turned into a mirror. Tenning turned and looked at a man who wasn't Tenning, and who had never been Tenning.

THEY'D done that in D'I. There'd been no mirrors there. Only Shan could have told the truth, and Shan couldn't be bothered. Five years, ten, twenty couldn't have made this difference. The bone structure was

different. He was older, but he wasn't an older Dave Tenning. Somebody else had grown older in D'If.

"Fingerprints," Tenning said quite a while later. He said it twice more before his voice was right. "Prints, Royce. They couldn't have changed those."

But then he looked at his hands. He knew what his finger-tips should look like. The whorls and spirals had been somewhat unusual.

"I think—" Pelham began.

"Never mind. They didn't forget anything. But my mind's still mine. I can remember the days on the old *Star*."

He paused. The doppelganger would remember, too. The doppelganger was a perfect double of the 1945 Dave Tenning, complete with memories and everything else. *Enoch Arden. A stranger, and afraid, In a world I never made.*

"There must be some way of proving—"

"I'm an open-minded man," Pelham said, "but Lord, I've known Tenning for years. I had lunch with him last Questen in Washington. You simply can't expect to get away with—whatever it is you're trying to get away with."

"Maybe not," Tenning said. "So they'll catch up with me eventually, and take me back to my cozy little apartment in wherever-it-is."

Pelham spread his hands.

"All right," Tenning said. "Thanks for something, anyway. I'll let myself out."

He did.

Mary was drinking her orange-colored chang at the counter when Tenning entered the drug-store. He perched on the stool beside her.

"Okay?" she asked.

"Just fine," he said bitterly.

"Got any plans?"

"Not yet. But I will have."

"Come along with me," she ordered. "It's my turn now. There's something I want to see."

He went with her, downtown, to a central plaza he remembered. They stood near the sidewalk, opposite the marquee of a hotel, and in the warm, prescient night the pulse of new life beat dimly in off-beat rhythm.

People were different, Tenning saw. It was nothing tangible. They had just grown older, but not as he had grown. Not as even Mary had grown. They were conditioned to . . . offbeat.

But every face held a latent consciousness of security. There would be no revolutions. The roots were firm in old things. And the new things were coming, gradually, inevitably.

"Blast!" Tenning said.

"What?"

It was all wrong. He could have adjusted easily to a completely new world. A civilization a thousand years hence would have been all new. That would have been acceptable. But by Fish decem 7 only the little things had changed. The little things, and the minds of men.

A man came out of the hotel and got into a car that pulled up. He was quite an ordinary man, but Mary's fingers clenched on Tenning's arm as the vehicle swung out and disappeared along the street.

"Eh?"

"That was Andy," she said.

He didn't get it for a moment.

Then he thought, "So it wasn't Andy who died. It was Mary. Or, rather, she stopped living. She stuck to the telephones when Andy started to get used to the psychophones."

She was a casualty, too.

"Let's go back to the beer-garden," Tenning said.

"Gladly. Come on."

It didn't take long. But there was somebody waiting at their table, the heavy-browed man Tenning had encountered on the steps of the *Star* building. He had a purple welt on his jaw.

Tenning's insides coalesced coldly. He poised, hesitating, and then glanced around quickly.

"I'm all alone," the man said. "Look, don't start anything. I forgot to give you this." He slapped a leatheroid folder on the table.

"You're not taking me back," Tenning said. Unconsciously he had gone into a crouch, Mary behind him, instinct flooding his bloodstream with violence.

"No. You left a week or so too soon, but it doesn't matter. Good luck." The man smiled, got up, and went out, leaving Tenning helplessly shaken.

Mary opened the folder.

"A friend of yours?"

"N-no."

"He must be. To leave you this?"

"What is it?" Tenning still looked after the heavy-browed man.

"Token-currency," she said. "And plenty of it. You can buy me a drink now."

He snatched the folder.

"Money? That's what—heck! I can fight them now! I can splash the truth all over the country! See if I don't—"

SHAN purred on the lap of the red-haired man.

"Tenning is the only one who's escaped so far, Jerry," the man said, gently tickling the cat's jaw. "And that wouldn't have happened if we hadn't been reconverting. Doesn't matter, anyhow, of course. He was due for a discharge in a week or so. You might look over

his records some day when you have time. Tenning's an interesting nonentity of the more troublesome sort."

"There's a lot I'm still vague about," the other man said. "My background's geopolitical. I'm not a physicist. The doppelgangers—"

"That's a matter for the technicians. You're specially qualified for administrative work, with psychological angles. Right now you're getting a bird's-eye view of the whole works—a sort of apprenticeship."

"The doppelgangers, though—well, the double concept's interesting. Not terribly important, but interesting. When the Double first goes out, the psychic cord between the two is very strong. That's why we have to keep the Original in custody—among other reasons."

"After a certain period the Double seems to acquire enough personality of his own to go on alone, and the Original's released. He's harmless by then, anyhow."

"He wouldn't have been, at first?"

"Oh, no. Not Tenning's type. He's one of the dangerous group. Not creative, but influential. You see, the creators and the technicians were with us from the start. They saw this was the only possible safe solution."

"But the Tennings, the fellows with a little talent and a lot of aggressiveness—imagine what damage he might have done in nineteen forty-five, yawping his emotional reactions over the air. Undisciplined, immature emotions, veering in all directions."

"It's normal, of course—everybody was veering in nineteen forty-five. That was what we had to put a stop to, before chaos set in. Tenning was one of the unfortunate in-betweens, guys with too much influence to run around free, and too little intelligence to come in constructively with us."

"We couldn't reason with his kind. We couldn't even tell him the truth. Tenning Duplicate has done a lot of good—under control. All our key men have. We need guys like Tenning to steer people in the right direction."

"Under control," Jerry said.

THE red-haired man laughed. "We're not the bosses. Don't start out with that idea even in the back of your mind, Jerry. People with dictator impulses are reconditioned—fast. Here's the answer—we could never be bosses in this set-up, even if we wanted to be. The change is taking place too slowly."

"That was our whole concept, of course, and the very slowness of the thing is the check and balance system that works on us. The minute any of us got dictatorship impulses, we'd have to change the social set-up."

"And the people won't accept quick change. They've had enough of that. There'd be

chaos, and one lone dictator wouldn't stand a chance. He'd have too many opponents. All we're working for—and don't you forget it, Jerry—is to focus the veering. That's job enough for any organization right now."

"What about Tenning? Now that he's free, he's harmless?"

"Perfectly harmless. Mellhorn gave him token-money enough to cover the transition period, and he'll adjust like everyone else—if he can."

"Pretty hard on him, isn't it, tossed out into a strange world?"

"It's not that strange. He'll learn. That is, he'll learn now if he ever would have. I'm not so sure. Some just don't adjust. It takes a certain flexibility and self-confidence to be able to make changes as your environment changes."

"People like Tenning—I don't know. It's a funny thing, Jerry, there's a whole new class sinking to the bottom of the social set-up now. People who can't or won't adapt to the new things. It happens after every major social upheaval, of course, but this time we're getting a new group of misfits."

"In the long run, a much higher percentage benefits, of course. It's too bad about the maladjusted group, but there isn't much we can do. I don't know about Tenning. We'll keep an eye on him, help if we can."

"But these men with half a talent and a taste for public adulation have got a bad weak spot to begin with. I hope he makes out all right. I hope he does."

* * * * *

"I don't get it, Dave," Mary said. "Whom do you want to fight?"

He gripped the leatheroid folder savagely.

"The big boys, the ones who built the psych-phones and started this screwy system of Fish decem seventh. All this—this stuff. You ought to know."

"But what do you want?" she asked. "What do you think you're fighting for?"

He looked at her. And, in the warm dimness of the air, the wave of the future stirred as an alien quickening that he sensed very dimly, and hated.

"I'll fight," he promised. "I'll—stop all this."

He swung around and went out. The waiter paused at Mary's table.

"Highball," she said.

He sent a questioning glance after Tenning.

"One?"

"Just one."

"He isn't coming back?"

She didn't answer for a moment as she listened to the off-beat rhythm of the music that had gone on beyond her.

"Not tonight," she said. "But he'll be back. There's nothing out there for him. Not any more. Sure, he'll be back—some day."

Tubby seized the cleaver and
raised it over his head



Tubby—Master of the Atom

By RAY CUMMINGS

*Off goes Tubby in the Time-Space-Matter-Mobile on a jaunt
to a distant era where an atomic beauty gives him the eye!*

TUBBY was excited at the very thought of this atomic lecture he was about to hear.

"Maybe he'll explode an atom for us," he whispered. "Think so? Just one, maybe?"

"You're raving," Jake said. "If even one atom explodes, it blows you all to pieces."

"That's right," Pété declared.

The little lecture hall was crowded. Tubby and his two friends had come early, to be sure

of good seats. Now they were seated comfortably in the first row. The place had filled quickly. When there were no more regular seats, the ushers had opened little camp-chairs. There were a few feet of empty space between the first row and the raised lecture platform.

That was too bad for Tubby because, presently, an usher came escorting what seemed to be favored personages—two baldheaded

little men, and a young woman.

The usher obsequiously placed the chairs on a diagonal partly in front of Tubby and his friends. The young woman had a weird-looking black hat with a feather and flower on it. She was very animated, whispering to her aged companions, so that in about a minute Tubby was dizzy trying to duck the bobbing feather and flower.

"Well!" he exploded audibly. "Some people just ain't got no consideration at all!"

The young woman turned. Tubby hadn't noticed her much before. He had been too busy gazing at the hat. He saw now that she was a slim and slinky girl in black, with a face that nobody could complain about. Her parted red lips were smiling, and the ravishing look of big, luminous dark eyes that she bestowed on Tubby made his head swim.

"Oh, I'm sorry," the young woman said. "My hat, of course!" She removed it and turned back to waste her charm on the two weakened little men.

"S'all right," Tubby murmured. "Thanks, you needn't have bothered."

"Sh-h-h-h!" Jake hissed. "Shut up! He's beginnin'."

A pale young man in black evening clothes complete with tails, boiled shirt and high collar, had appeared on the platform. His voice was soft and very pleasant. Soothing. He was sort of hypnotic, Tubby thought. But if you listened close to what he was saying, it was the real McCoy. Gave you plenty to think about.

"Now the uranium atom is the most complex of all atoms," the lecturer was saying. "It has in it ninety-two electrons. Each of them has a charge of negative electricity, and they spin in orbits around a tiny, but heavy nucleus. And this nucleus is made up of ninety-two positively charged protons plus one hundred forty-six neutrons, which are electrically neutral. This atom we call U-Two-thirty-eight. That is, ninety-two plus one-hundred-forty-six which equals two-thirty-eight. Now in order to split that atom and thus release an enormous amount of energy, we add to the nucleus a slow-moving neutron produced with the aid of radium or a cyclotron. . ."

DEEP stuff this. Tubby wedged his fat little body down more comfortably in his chair. The lecturer droned on:

"Now the mechanism of an atomic bomb, for instance, by which a slow-moving neutron strikes the atom, consists of—"

A twitch at his coat sleeve made Tubby turn. A man was standing beside him in the aisle—a thin, bent little man with a big wobbling head and a mass of iron-gray hair. He had a felt hat in his hand. His fingers were crushing it in suppressed excitement.

"You're Tubby?" the little man whispered. "I've been looking all over for you. Come on. Quick, now!"

Tubby was startled. "Come on where? Why? Is somethin' wrong?"

"Things are very right," the little man murmured. "Now that I've found you—very right indeed. But hurry!"

Before he really realized it, Tubby was in the aisle and the stranger was guiding him to a side exit. In the dim hall no one saw them leave.

"Hey, wait a minute, where we goin'?" Tubby asked.

It was drizzling out; much too disagreeable to roam around. The little man turned up the frayed collar of his dark coat and pulled his hat-brim down over his eyes.

"We're going to my chemical laboratory," he answered briskly. "My! I'm glad I found you, Tubby."

"Me, too," Tubby said. A gentleman is always polite. "Glad to meet you, Mr.—er—"

"I'm Professor Ikon," the little man said. He turned his thin, seamed face toward Tubby, and beamed. His features wrinkled up into a knot and his scraggly teeth showed.

"Oh, well, glad to meet you," Tubby acknowledged.

Professor Ikon looked disappointed. "You've never heard of me! Well, I suppose that's the best I could expect. That's just the trouble. Almost no one has ever heard of me. But that's what I'm going to fix. Right now! And you're going to help me! You and I, Tubby. We're going to be the best known people in the world. And the most powerful!"

It sounded fine, but Tubby had no chance to go into it further just then because the Professor suddenly turned into a dark entryway and began fumbling with a key. The door opened.

"Come in, Tubby. Take your coat off and roll up your sleeves. I'll have everything ready in a minute."

This Professor Ikon was a man of action. Tubby flung off his coat and rolled up his sleeves ready for business. The Professor switched on a light and began bustling about. It was a small, dingy room crowded with

queer-looking apparatus. Wall shelves held big bottles of colored liquid and what looked like radio tubes and grids and flashlight batteries. Everything was electrical, with wires lying around like dead snakes.

The Professor knelt down in the middle of the floor where what looked like a small canoe of white aluminum was standing. The canoe glowed with a luminous electrical light. Then the Professor turned off a switch and the glow died out.

"Fine!" he said. "Everything is ready." He gestured toward the canoe as he stood up. "There, you see? It will hold us two comfortably, though I guess it will be a little crowded, coming back with three."

"Comin' back?" Tubby echoed. "Where we goin'? And why?" Caution is always the better part of valor. "Ain't you rushin' me, Professor? Let's take a minute an' get things straight."

"A minute!" the Professor said. "Why, I've taken all my life, Tubby, in studying this thing, working on it. I'm ready now, at last. But if you insist on technicalities, I'll explain."

He did. Tubby listened, open mouthed.

It was a thrilling project. The Professor had seen a girl—she was extraordinarily far away, but still he had seen her—not once, but many times, for several years now.

"I am able to see her, with what I call my 'Time-Ocularscope,'" Professor Ikon explained. "I remember I was roaming with my vision back and forth through Time. The future, the past, all the myriad Time-worlds. And then, quite by accident, I spied her."

The little Professor sighed, and his far-away look was so rapt that Tubby realized this must be a very remarkable girl indeed.

"A good looker?" Tubby demanded.

"The best. The very best, Tubby. Her eyes particularly." Professor Ikon sighed again. "That gaze of hers! So beautiful, so compelling. It has made her Princess of her world. Its Supreme Ruler."

EVIDENTLY a remarkable situation in this strange, distant world had developed. The Professor quite obviously understood it thoroughly, through years of studying it with his Time-Ocularscope. By the very power of her beauty and flashing gaze, this Princess had made everyone in her world bow to her will.

"Like hypnotizin' 'em," Tubby suggested. "Am I right?"

"Yes. Right. That is, you could call it hypnotism, if you wish," Professor Ikon admitted. "Though it's a bit more scientific than that. I needn't go into all the technicalities."

"Because she's a swell-looker, and that's the most important thing," Tubby agreed. "Okay. Rig up your—whatever that was you called it—and let's see her."

"But we can do better than that, Tubby." The Professor's weazened face was flushed. He was trembling all over with excitement. "My Time-Space-Matter-Mobile will take us to her. I've worked years on it now—all the best years of my life, and it's ready." His gaze was on the small, canoe-shaped aluminum vehicle.

"That?" Tubby murmured. It looked like a precarious thing to travel in.

"That's it," Professor Ikon admitted tenderly. "And now, since it's ready, why waste effort just looking at the Great Princess when we can hop in and go to her?"

The logic of his reasoning was perfectly sound.

"Right," Tubby agreed.

In his eagerness, the little Professor already was starting to shove Tubby in. But it occurred to Tubby that he didn't yet have all the facts concerning this thing.

"Just a second, Professor," he said. "What did you mean? You said you and I are gonna get to rule the earth and be the best known and the most powerful people in the whole world. We'd be the richest too, maybe, huh?"

"We will, Tubby! Of course! The richest men on earth, because we'll control everything and everybody. We'll bend everybody to our will."

"Make 'em do what we say? Am I right?"

"That's it, exactly."

"But how we gonna do it?" Tubby demanded practically. One should have a definite plan, especially in such a big project. "And this Princess? What's she got to do with it?"

"Everything, Tubby. Absolutely everything."

It was a very neat and tricky plan which the Professor had worked out. They would go now and bring the Princess back with them. When they had her here, she would master everyone here on earth, by the strange and intricately-scientific power of her gaze, just as she had in her own world.

It sounded quite a lot of mastering for one lone girl to do, no matter how good a looker

she was, but Professor Ikon was very confident about her powers.

"Believe me, Tubby, she can do it," he declared earnestly. "I've seen her do marvels in her own world." Ikon's expression was awed. "I don't need to bother you with the technical science of it. How she does it all is quite technical. But I understand it, Tubby, and if you insist, I'll explain."

"S'quite okay," Tubby agreed. "If you've really seen her perform, okay!"

"I did. I saw her quell a rebellion. That was two years ago."

So they would bring the Princess here, and she would make everybody in the world obey her. That was fine, but still Tubby could detect a flaw in the scheme.

"She'll boss everybody," Tubby said. "But who'll boss her?"

"You will," the little professor said triumphantly. "That's why I need you to go with me."

"Me?" Tubby said.

"Of course. Why, I've heard of you for years, Tubby. You'll charm her—master her."

"Will I?"

"Of course you will. The things I've heard about you handling girls are marvelous. That's why I wanted to find you tonight. I had to find you. See?"

"Well, I do get along with girls pretty good," Tubby said modestly.

"I know you do. And when you really put your mind to it, with such gigantic issues at stake, it'll be a push-over."

After all, the Professor's argument was irrefutable. Tubby thumped his chest.

"Okay, Professor. Let's go."

The little Time-Space-Matter-Mobile was pretty narrow, but Tubby wedged himself down into its bottom, with the Professor sprawled beside him. For such a small vehicle, there were certainly a lot of mechanisms—wires, batteries, and dials. A panel of dials, like about a hundred tiny clock-faces, was up in the bow where Professor Ikon was crouching.

"Now, hold still, Tubby." The Professor's voice was trembling with emotion. This was certainly a big moment for him, after all his years of work. "Don't move now. I'll adjust the electrodes on you."

IT SOUNDED bad, but Tubby held himself motionless while the Professor fitted an aluminum cap to his head, with wires down

to his wrists and ankles, clamped there with metal bracelets. There was also a collar and belt which went around Tubby, too. Then Professor Ikon fitted himself up in the same way.

"And we have a third apparatus for her," Professor Ikon said. "You see, I've thought of everything. Now! Brace yourself, Tubby. I'll start us."

The little Professor's fingers trembled with eagerness as he fumbled under the inside of the gunwale. Tubby certainly hoped he wouldn't do anything wrong in his excitement.

"Take it easy," he cautioned the scientist. "We ain't in too much of a hurry. Which way do we go? Maybe you better explain to me—"

He had no chance to finish. Professor Ikon had shoved the switch. It was quite a shock. Everything got pretty mixed up and confused for Tubby. The laboratory room swayed dizzily, and then seemed to burst with a soundless explosion. Or was the explosion in Tubby's head? His ears roared. The blinding light was dazzling.

For a minute he couldn't see anything. He just seemed to be swooping around in a big empty abyss.

Where was the Professor? Where was the laboratory room?

The effect was certainly peculiar. Tubby thought maybe he was dead. Then he knew he wasn't, because he could feel himself wedged against the curving sides of the vehicle and his head was steady. Every place he looked brought glimpses of a great, empty void of gray swaying mist.

The little canoe-shaped vehicle seemed to be hanging in the center of it. And now Tubby could see that the gunwale beside him was becoming luminous. When his hand happened to touch it, he discovered that it was warm and throbbing with a rapid, tiny vibration.

The Professor had been knocked out cold. He was sprawled out beside Tubby in a senseless heap. A green phosphorescent glow made him look awful.

At last he stirred, and sat up dizzily.

"Why—why—oh dear!" he murmured, "I must have started us too quickly. Are you all right, Tubby?"

"Sure," Tubby said. "I guess so."

They were in full flight. The luminous hands on all the little dials were stirring. Some of the pointers were whizzing around

so fast Tubby couldn't see them. But everything was all right now. The Professor was triumphant.

"Wonderful, Tubby. We're on our way." He rubbed his palms together in triumph.

"On our way, where?" Tubby demanded. "Listen, Professor, you ain't yet told me just where we're goin'."

"Well, so far, in Space, we haven't moved at all," Professor Ikon explained. "We're just where we started. This is my laboratory room."

"Don't look like it," Tubby said dubiously.

"No, of course it doesn't. Because our movement now is in Time." He consulted his dials. "We've just passed the year of Eighteen-fifty. But of course we're picking up speed pretty fast now."

All the changes of these speeding years were blending together, as Professor Ikon made clear, so that all Tubby could see was a swaying gray abyss.

"We're goin' into the past, right?" Tubby said. "So that's where the girl lives? Right here, but back in the past?"

"Well, yes and no," the Professor said. "You see, Tubby, it's a little more complicated than that. First we go back to the early centuries."

"How far back?" Tubby asked.

"The year Nine Thousand-and-one B.C. That's just roughly speaking, of course. Naturally, I've calculated the exact month, week and day."

It sounded like a long distance. Suddenly Tubby had a startling realization. He was getting hungry, and thirsty.

"I hope you brought somethin' to eat and drink with us, Perfessor," he said. "I ain't seen no food around here yet."

The Professor seemed to have forgotten that little detail. But he covered it up.

"Why—my goodness, I think that is hardly necessary, Tubby. The trip won't take long, not to our consciousness of the passing of time. Why, already we're—" he consulted his dials—"passing Fourteen Ninety-one. Columbus is just getting ready to discover America. Of course we're still moving comparatively slowly. But our acceleration is tremendous. In geometric ratio it's absolutely terrific."

They got back to the year One Thousand, A.D., almost before the Professor realized it, and that wasn't a marker to the speed they'd have presently.

"I think I'd better start moving us in

Space," the scientist said suddenly. "You see, in Space the girl is living at what my calculations show to be Latitude twenty degrees two minutes one second North, and Longitude Eighty degrees, three seconds. That's about Little Cayman Island, south of Cuba. We have to pause there, in Nine Thousand-and-one, B.C. But from then on, we don't go further either in Space or in Time. We stop."

THE Professor had no chance now to explain anything else. He was too busy moving them in Space. He pressed a lot of new levers. Tubby's head whirled again. All he could see was that the gray void around them had started to sway a little more. He could almost imagine it was drifting backward as they slid forward through it, heading for Cuba. The vehicle throbbed a little differently. It glowed now with a reddish tinge.

"Three Thousand, B.C., and we're passing over the Space of about Charleston, South Carolina," the Professor announced suddenly.

The little Time-Space-Matter-Mobile was certainly going places in a hurry. Tubby was glad the trip would be brief, because now he was growing very uncomfortable. His wedged body was cramped. He had also begun to realize the sides of the vehicle were getting pretty hot. Worse than that, they were getting hotter every minute, and he could smell the choking odor of chemicals. Something was burning!

"Hey, Perfessor somethin's wrong!" Tubby warned. "You better watch out!"

The Professor also had noticed it.

"Oh, dear—oh, dear!" He looked frightened and confused, which was bad because Tubby didn't know how to operate this thing. Obviously plenty of action was needed, right now, in a hurry.

"Oh, my! I'm afraid!"

Tubby gripped him. "Brace up, Perfessor! What's gone sour?"

Something had gone very sour indeed. The chemical fumes were getting worse. The gunwale of the vehicle was now so hot Tubby could hardly sit still.

"I must have put on too much speed!" Professor Ikon wailed. "Dear me!"

The little Time-Space-Matter-Mobile was running plenty hot! A million of its tiny, intricate bearings were in danger of burning up.

"Do somethin', Perfessor. Listen, we gotta

act quick."

"Yes. Of course. I'll act. We'll have to land. I—we—I'll land us."

It was certainly a crash landing. The Professor's shaking hands seemed to pull all the switches at once. Tubby heard him mumbling something about the Time of Seven Thousand, B.C. and the Space of mid-Florida, and everything jolted into chaos. The next thing Tubby knew was that he and the Professor must have catapulted out of the vehicle, because now they were lying on a leafy ground. The Professor was trying to sit up.

"Tubby!" he gasped. "Look!"

Tubby got partly to his feet. The little canoe-shaped vehicle was here. It didn't appear to be smashed. A wisp of green-yellow smoke was rising from it and its bow had dug into a leafy, mouldy soil. But otherwise it looked all right. None of that was what the Professor meant. His arm was shakily gesturing.

"Tubby! Oh, my, goodness!"

All around them was a lush, steaming jungle. It was gorgeous. But Tubby had no chance to admire the scenery, because out of it strange things were coming at a run! A ring of them, advancing from everywhere! There were horned brown animals, like giant antelope; lumbering, monstrous alligators, with yawning jaws; and great snakes, like pythons, that slithered along the ground.

In the trees other things scampered, getting ready to leap. All of them were yelling, with every kind of animal voice. And in the air, birds like huge vultures were circling, swooping down! Mid-Florida in the year of Seven Thousand, B.C. quite evidently was a busy place.

And it was the abrupt arrival of the Professor and Tubby which had caused the excitement. Tubby needed only one swift look.

"We gotta get outa here!" he yelled. "Peffessor, this ain't no place for us."

Plainly it wasn't. All these creatures most certainly were greedily hungry, racing to beat each other to the meal.

Tubby sprang into action. It was nip and tuck. He yanked the Professor into the vehicle, and wedged himself down.

"Get us goin', Peffessor. Snappy now."

Somehow the still-dazed Professor managed to pull the right levers. Everything lurched; the ring of hungry animal faces and slithering reptiles all seemed to dissolve into grayness. . .

The little Time-Space-Matter-Mobile was on its way again. It had cooled off and again was running sweetly.

"Let's take it kinda slow, eh, Peffessor?" Tubby suggested. "Don't wanta heat her up again."

EIGHT thousand, B.C. And in Space they were steadily drifting to the designated latitude and longitude.

After a while the Professor commenced slowing up. There was another moment of chaos as they stopped, but compared to the crash landing, it was very easy.

Nine Thousand, B.C. Lat. 20° 2' 1" N. Long. 80° 0' 3" W. So far so good. Tubby took a look around. There was a lot of sand, a stretch of glassy water and, off to one side, the edge of a jungle. It was night, with stars that looked just about as usual.

"Okay," Tubby said. "Where do we go now, Peffessor? Don't have to stop here long, do we?"

Where they went from there sounded pretty complicated to Tubby, but the Professor assured him that it wasn't.

"We start right away," he said. "This is the right spot, and the right time, but now we have to go into a different material world."

It was like going into the fourth dimension, Professor Ikon explained. A fourth dimensional world of this exact Time and Space.

"You see?" the Professor said. "In a way, you could say we're now going sideways in Time, since we go neither forward nor backward, but just hold level. We only stopped because I was afraid to turn the corner too quickly."

"We might skid," Tubby agreed.

They were off again in a minute, with the vista of sand and water melting into a dim shifting void. The little vehicle glowed with a dim orange sheen now and emitted a faint humming noise. But the trip was short and the gunwale didn't heat up.

"Now!" the Professor murmured. "Here at last!"

There was quite a nasty jolt, but Tubby kept his wits. The Professor as usual was pretty well knocked out, with his head down on the floor boards and his arms trailing limply. Briskly Tubby sat up. Somebody had to be alert, after that experience in the year of Seven Thousand, B.C.

All was well, but peculiar. The light of this new world consisted of a faint twilight

glow. Ribbons of luminescence flickered up from the rocks. Phosphorescence shimmered in the water of a little lake nearby and glowed in all the branches of the drooping lacy trees.

It was a beautiful, though queer-looking landscape. Outlines were blurred, as if being viewed through water. Distant fields were visible, with the little dark shapes of things growing in them. Overhead arched the sky, like a purple vault, very close, so close that Tubby tried to reach up and touch it, but found that he couldn't.

The Professor once more had come to life. He sat up, felt himself to see if he was all in one piece, and then looked around triumphantly.

"We're here, Tubby. Wonderful! Exactly as I calculated. Look! There's her palace."

He had certainly steered a neat course to their destination. Off to the left, part way up a little rose colored hill, a big, low, shining building stood under the drooping, fantastic red and bluish trees.

Tubby was still wearing the electrodes and wires. He started to take them off, but the scientist stopped him.

"Might as well leave them on, Tubby," Professor Ikon said. "Wait, I'll take along a set for her. We'll go get her and bring her back here." Ikon gathered up the third set of wires and electrodes, and hustled Tubby along a little path that led between tall palm trees to the palace.

It was a daring scheme, this abduction of a Princess, particularly one who was so powerful she ruled her world just with a gesture and a look. Now that the time was at hand, Tubby grew tense with excitement. He gazed around apprehensively, but there was no one else in sight. Everything was deadly quiet.

"Maybe this is the middle of night here," Tubby whispered, as they crept closer to the dim and silent palace.

The Professor chuckled. "Of course it is. That was my plan. I figured everything out, down to the exact second. She'll be asleep. We'll sneak in, wake her up and you'll make her come with us."

Tubby hoped he could.

"Sure, sure," he agreed.

They moved closer.

"There's her window," the Professor murmured. "See it? We'll climb in."

Tubby saw it, a little triangular hole in the flowered red wall of the glowing build-

ing. Big round balls of flowers on long stems swayed to and fro, here in the palace gardens. They were nearly as tall as Tubby. As he and the Professor moved furtively between them, they rustled and stirred as though frightened. The effect was creepy.

"Lookit," Tubby whispered. "Them flowers—they're afraid of us!"

The Professor cast an uneasy glance at them. "They do act queer, don't they?"

QUEER was a mild word for it. Tubby and the Professor had passed through the garden now. Behind them the ball-flowers had shifted so that they were clustered together.

Sounds came from them, tiny, muttering, frightened voices.

They weren't flowers. They were people! They had little stick-like brown stems of bodies, with branching arms and legs and the round reddish ball at the top which was the head. For an instant they faintly chattered in terror.

Suddenly they all turned and ran, vanishing in the dim red, phosphorescent sheen of the night.

Tubby gasped, but the Professor was relieved.

"Why, I remember now," he whispered. "Those are the workers of this world. And sometimes at night they come to worship outside the Princess' window."

Yet they had run away in terror. Very good. Tubby expanded his ample pudgy chest.

"Scared the daylights out of 'em, eh, Professor?" he said with a chuckle. "If the Princess has any Palace guards around here, I'll handle 'em."

But no guards appeared. There was a loud thump as Tubby climbed through the triangular window and went sprawling flat inside on the floor. The Professor landed upright, but lost his balance and sat down with a force which was hard enough to rattle the electrodes he was carrying.

"Sh-h-h!" Tubby whispered. "Quiet! Don't fall down so loud, Professor."

They crouched there, panting, and listened. But nothing unpleasant happened. The Princess hadn't waked up. She was over there, sleeping peacefully on a mound of rose-colored cushions in the center of the room.

It was a big, perfumed room. Soft-colored drapes of delicate tints hung everywhere in

big folds. Phosphorescent light shimmered on them. Tubby gazed raptly—not at the drapes—but at the sleeping Princess.

The Professor hadn't exaggerated. She was a swell looker. Her shimmering, pale-blue robe showed that she had curves in all the right places, and she was lying gracefully with one pink-white arm crooked under her head. Her hair, shining like fine threads of silver, was spread on the pillow, framing her face. Nobody could want his girl to have a nicer face. But the beauty of this one was somewhat marred, because even now in sleep, the Princess was wearing big dark spectacles, like smoked-lens sun-glasses.

"There she is!" the Professor was murmuring with awe. "Go wake her up, Tubby. Charm her, let her know who's master around here. Hurry now. We want to get her out of this place right away."

He gave Tubby a shove. Waking young ladies up was not exactly in Tubby's line, especially Princesses. But he started forward masterfully. He didn't get very far. Unfortunately Professor Ikon had put the third set of electrodes and wires on the floor. Tubby's feet got tangled. He fell on his face, and by the time he had staggered erect again, the Princess was sitting up in bed, with her silvery hair falling in a mass over her slim shoulders. She was astonished as she stared at Tubby. Next she grew angry. The glasses hid her eyes, which probably were flashing royal wrath. Tubby could tell by the set of her beautiful red lips how annoyed she felt.

"Rumpff!" the Princess said.

Tubby maintained his dignity. He got to his feet and smiled his very best smile.

"Hi-ya Princess," he said. "Pleased to meet you."

"Rumpff, scropff!" the Princess said.

In a way, it began to look as if this could be tough going. Tubby took another step or two toward her. The Princess didn't act frightened. About the only emotion she was registering was indignation. Her dainty hand made a gesture toward her heavy dark spectacles, but she seemed to change her mind and dropped her hand to the cushion beside her.

"Rumpff, scropff, ruzzle!" she said in sharp tones.

From across the room, the Professor murmured.

"Oh dear, I forgot she can't understand you, Tubby. Maybe if you try Sanscrit or

Lemurianese, she'd get what you mean."

His voice went into a squeal of terror. It made Tubby turn, just in time to see the rose-colored drapes across the room parting. The Palace guards had arrived!

Tubby gulped and stood staring, numbed. These weren't little men with bodies like flimsy brown sticks. Anything but. In the folds of the wall-drapes a huge, ugly-looking customer stood looming—a scowling, massive, hairy villain about eight feet tall! His naked barrel chest was black with matted hair. His shoulders were wide and thick as a gorilla's. His big-jowled face was scowling. A thing that looked like a huge meat cleaver was in his hand. He brandished it murderously as he rushed at Tubby. Behind him there were other guards, fully as big and as ugly.

"Oh dear!" the Professor squealed. "Oh, my goodness."

The scientist cowered on the floor over by the triangular window and it occurred to Tubby that he might leap to safety through the window, but he was standing so far away the idea wasn't practical. Maybe a good stiff bluff would work.

"Stand where you are, you villain!" Tubby yelled. "You take one step closer and, s'elp me, I'll shoot yuh dead."

BUT the big villain didn't get the idea at all. He kept on coming, with the meat cleaver raised over his head.

"Tubby! Tubby, watch out!" the Professor shrieked.

The Princess was sitting up even more imperiously on her cushions. Again her hand made a gesture toward her spectacles.

"Gruff qumbess dimarko—ruffp," the Princess ordered.

Her command stopped the oncoming hairy scoundrel. He dropped his meat cleaver and stood stiff as though frozen. The other scoundrels behind him cowered back. The meat cleaver hit the floor with a clang, slid and brought up against one of Tubby's feet. His chance!

He stooped, seized the cleaver, raised it over his head and jumped. It was quite a meat cleaver. Its heavy cutting edge struck the first villain square in the middle of the skull. As though he were a statue carved out of soap, the cleaver went down through him, dividing him neatly in half.

For a second, or so, the two halves of him stood balanced, each on its leg, then fell,

with a splintering crash, like glass breaking. "Whiff!" the Princess gasped. She was evidently very much at home with violence. She flung a glance of contempt at the fallen giant, and bestowed on Tubby a smile fairly dripping with admiration.

"Neez," she murmured. "Nickl."

Her hand made a little gesture, beckoning him.

Professor Ikon had recovered himself.

"Wonderful, Tubby! She wants you to sit down by her. Hurry it up. Don't be backward."

Tubby realized it was no time to hesitate. The other guards had slunk away, but more might come. He sat down.

"Sorry if I frightened you, Princess," he said.

What difference did it make what he said, since she couldn't understand him. It was what he did which would count. He touched her arm. "You and me could get along swell maybe?"

"Rickl!" the Princess said. "Sappo ptush."

"The idea is to get outa here," Tubby explained. He made violent gestures toward the Princess, the Professor, himself and the triangle of window. "We're gonna take you away, see?" He gripped one of her hands.

"Sappo," the Princess said again. Her lips were smiling. But Tubby couldn't see her eyes and those miserable dark glasses spoiled her beauty. Tubby impulsively reached for them, yanked them off and tossed them away.

"Let's see what you look like, Princess. You sure are a grand looker and them cheaters ain't becomin'. Not at all."

A gasp from the Princess and a yelp of horror from the Professor cut short his admiring words.

"Tubby! Tubby! Oh my Heavens."

"'Sall right, Professor. She ain't mad."

"Tubby—her eyes!" the scientist screeched. "Look out! Her eyes are deadly."

"They're swell." For a second her luscious gaze had swept Tubby. It made him tingle. Flashing, loving, admiring gaze. But the little Professor was trying to climb out the window, squealing with fright.

"Run for your life, Tubby," he howled.

"Her eyes are the secret of her power. Her eyes flash neutrons! *Slow-moving neutrons!* Oh, I should have told you!"

Slow-moving neutrons, streaming now

from her flashing eyes! Neutrons that would join the nucleus of the atoms here—and split them, with an enormous release of energy from the fission!

The poor Princess was trying now to cover up her eyes, but it evidently didn't feel too good on her hands. Tiny bursts of light rose from them. In despair she flung an agonized glance across the room after her spectacles.

Too late! A billion tiny explosions went off with pin-points of light everywhere she looked—atoms exploding—one setting off the other. . . .

There was a second, in the midst of that horrible atomic roar, light and heat, when Tubby tried to stagger to his feet. Then a blast of white-hot pressure flung him down again. Frantically he clutched the Princess. She was murmuring with horror, and twitching, pulling away from him. Tubby could also hear scraping sounds, such as chairs being violently moved. Angry voices were murmuring. Faint, distant voices, coming closer, clarifying . . .

"Oh migosh, Tubby!" It was Jake's voice now. "Leave her be. Are you dotty?"

"Stop him! He's crazy! There were a whole lot of other voices.

Tubby opened his eyes.

It wasn't the Princess he was clutching. It was the handsome, sleek young woman in black with the two little bald-headed men beside her! Tubby discovered that the crowded lecture hall was in an uproar.

He had slumped forward and sidewise, half off his chair and was gripping the handsome young woman vigorously. She had flashed him a luscious, ravishing look with her dark eyes when she took off her hat before the lecture began, but that wasn't the kind of look she was giving him now. This one was a searing flame, devastating as the flash of an atomic bomb!

"Let go of me," she screamed. "You nasty little buttertub!"

Jake grabbed at Tubby. "Leave her be. We gotta get outer here."

"Yeah, that's right," Tubby said.

"Sure have, quick!" Pete agreed. "We gotta get ourselves outer here."

But they didn't have to get themselves out. A whole platoon of ushers came and threw them out through the side exit, into the rain-swept street.

THE READER SPEAKS

(Continued from page 6)

by mistake, so he had had no covers to work from. Now their backs were turned! Now was the time to escape!!!!

I touched my nose with my tongue and uttered the powerful word "Thrillingwonderstoriesbigsciencefictionmagazine!!!!!!!" There was a flash of lightning, a terrific roar, and the whole building was torn apart. I escaped, and so, evidently, did the Sarge and his crew.

It is now 4:30 A.M., and as I sit here writing, I hear a noise like the tread of a robot. It is one! No! No! A-a-a-a-a-a-a-a-g-h-h-h-h!!!!!!

Seriously, the mag is pretty good except for the covers. Even they would be okay, if Bergey would leave out his people. The main trouble is, the people etc. are emphasized too much. Tone down some of those poses, and they would be okay. This issue had a cover that wasn't so bad, except for the girl.

Now the stories:

I suppose everyone likes to rate the stories, so I guess I'll take a try at it too.

First place: *Battle of the Brains*. Excellent. Many more Shelton stories.

Second place: The short, *Rocket Skin*. I like the original idea. Well told. Good.

Third place: Tie between *Rocket Pants* and *The Indestructible Man*. Fair.

The rest of the stories weren't so hot, but they were okay.

I like the Reader's department. I get a big kick out of it. I know I can always turn to TWS for entertainment as far as *The Reader Speaks* goes.

Hey, I just realized that I haven't told you that I am a new writer to this column. Hope to keep it up. If you must have poetry from the readers, why not put it in a special section.

Since epistoler Brown is a neophyte, we can, we suppose, forgive him for emulating such regular predecessors as Joe Kennedy, Chad Oliver and the like, all of whom have employed this somewhat maize-spattered stencil repeatedly. However, this is the last of them we shall ever print in "The Reader Speaks." So be it!

OUR NEXT ISSUE

THREE feature-yarns headline our next TWS, and all of them should be good news for readers. The novel is by Henry Kuttner whose newest science fiction yarns show that he is certainly burgeoning into even greater post-war brilliance. In *I AM EDEN*, a story of radioactive experiments in a far corner of the Amazon basin jungle, he lives up to everything ever promised for him. It is a yarn that combines pseudo-science with fantastic horror in a manner which is not only logical but, perhaps by that very reason, terrifying almost beyond sanity.

An amazing novelet, *PHALID'S FATE*, is by Jack Vance, our brilliant discovery of 1945. With his powerful writing talent and fresh imagination, Vance has tackled the problem of the meeting between human and insect brains which has long been a subject of STF speculation and come up with an entirely new slant. This story should serve to establish Jack Vance as an important name in the field.

Murray Leinster's *POCKET UNIVER-*

SES in the present issue is one of the best stories ever written by one of the best authors of STF extant! Well, Mr. Leinster has come up with an equally brilliant sequel entitled *THE END*, for next issue! Moving swiftly into the far-distant future, he creates a world threatened with galactic catastrophe and unable, thanks to human inertia, to save itself—until a young rebel with ideas and imagination defies the powers that are to be, and saves mankind and the galaxy by an amazing reapplication of the pocket universe, safely stored in a museum.

This line-up of Kuttner, Vance and Leinster is one of which we are justifiably proud—and one which we fervently hope you will find engrossing and entertaining, as you will the short stories and the regular features which accompany the longer fiction works. The issue should brighten many a dark and chilly late-fall evening.

LETTERS FROM READERS

While the majority of readers wants the Sarge changed and changed plenty, he still has a few who cling to the ancient concept. Witness the following:

LET THE SARGE STAY

by John M. Cunningham

Dear Sgt. Saturn: Whatzis I hear? Sgt. Saturn to be honorably discharged? Nix, you can't do it—there's a war still on ya know—and the good Sarge must see it through as all good Americans should. Let the honored assembly at the NEWARK STF-CON say what they may—we want Sgt. Saturn—so there!

To impugn my views on the latest TWS is now my task at hand. The cover is rather a grotesque affair, a bit on the "sexy" side. It's interesting to note some "yokel" is advertising in the various "fanzines" now for more "sex in Science Fiction". I myself am campaigning for more *PSYCHOLOGICAL* angles in stories.

In "Battle of the Brains" it's evident author Shelton knows more on this subject than Rockets—if a recent statement of his in a competitive magazine is to be taken for merit. Rockets, I surmise, are a bit too fast for his "brain" to register accurately.

The "shorts" were of unusually high calibre—bringing into full light that these writers are still masters of STF.

READER SPEAKS still rates the usual "tops"—2050. Gilbert Street, Beaumont, Texas.

Thanks for the kind words, Reader Cunningham—but, alas or otherwise, your "we" who want the Sarge as of yore seems to be a trifle too much on the editorial side. If you prefer psychology to sex, that's your affair—personally the Sarge feels each has its place in human affairs. And as for Mr. Shelton on the subject of rockets, we think he does better than all right.

Now let's turn to the next letter.

OUT OF A TIME WARP OR SOMETHING

by Dr. S. W. Russell

Dear Sir: The other day I ran across a copy of your magazine TWS, Vol. 8, No. 2, dated October, 1936, in the house of one of my patients. I borrowed it and read it. I have become interested and would be very grateful if you could let me have the following information—

(1.) Would it be possible for you to let me have any of the back numbers which are available?

(2.) Could I place an order with you to send me current numbers as and when they become available?

(3.) Could you let me know the cost of the available past issues if you can let me have them?

If you can and the outlay is not too large, I will send you a money order for the amount, including postage before you despatch the books. I cannot enclose a stamped envelope for your reply as American Stamps in England are only to be found in albums.—Bank House, Bromyard, Hereford, England.

A lot of heavy water has poured over the TWS dam since October, 1936, Dr. Russell. As for your obtaining back copies from us, that is, alas, impossible at the moment. But I'm printing your letter in the hope that some of our bartersome collectors will get in touch with you and enable you to work out something.

You can subscribe to TWS or to **STAR-GLING STORIES**, its companion magazine, by sending us a money order for \$2.40, which includes postage. Domestic subscriptions cost \$1.80. Such a subscription is of two years' or twelve copies' duration.

TRACE OF PACE

by Tom Pace

Dear Sarge: The best tale in the Spring TWS was Shelton's **BATTLE OF THE BRAINS**. Swell . . . Shelton is rapidly climbing up the list.

Bradbury's **ROCKET SKIN** was second. His style is unique. I like it and **ROCKET SKIN** is a good example. I've never run across the idea of hitch-hiking on rockets before. Dunno, it should be quite different from hobnobbing on trains.

FIND THE SCULPTOR was good, but I've read that plot before. For that matter, what plot haven't I? Only one out of the many, like Bradbury's. It's still good.

UNDERMOST and **ROCKET PANTS** were very readable **STF**. I usually enjoy Leinster's stuff a great deal. **LIKE DUPES** was appalling—fantasy mixed with **STF**.

JONES' PHYSIQUE was a neat little yarn. But when Kirkland fastened Locks and Jones in the cabinet, why wasn't Jones shrunk some more?

The cover was fair, although the machine did not look convincing. Why not a smooth-skinned featureless metal cigar, such as the story described?

DEAD CITY looks good. A perfect issue of TWS would include **BATTLE OF THE BRAINS** . . . **DEVILS FROM DARKONIA** . . . **THINGS PASS BY** (Leinster) . . . **THE WORLD THINKER** (Vance) . . . **SWORD OF TOMORROW** (Kuttner) . . . **FORGOTTEN WORLD** (Hamilton) . . . **THE DISCIPLINARY CIRCUIT** (Leinster)—in other words, the seven best stories out of the last five issues.

If you could only give us an issue with Kuttner, Leinster, Shelton, Hamilton, Vance. . . . Oh—oh—one yarn I forgot. It's the sort of tale that grows on you. . . . George Whitley's **ONE CAME BACK**, last Fall. I have a good idea who George Whitley is—and that's quite a tale too.—*Eastaboga, Alabama.*

We don't know why Jones didn't shrink

some more, but it didn't spoil the story for us. The metal cigar might have—to say nothing of the cover. But let it pass for the nonce.

As for your issue with Kuttner, Leinster, Shelton, Hamilton and Vance, we come pretty close to your ideal with novelets by Kuttner, Leinster and Vance slated for next issue. The only short story definitely scheduled is by Arthur Leo Zagat, much too long involved with OWI labors from which he is recently released. That should hurt no one's feelings, nor should a tentatively scheduled short story by Keith Hammond. And there will be others, perhaps a Hamilton to bring your dream closer to reality, Tom. We have nothing new from Shelton on hand at the present. Too bad.

MORE APPROBATION

by Ray Corley

Dear Sarge: My pal! Greetings! Hello. Glad to see you. Yes indeed. You deserve a pat on the back. Great issue. Best yet.

Again Earle Bergey has started the word of Fandom. The eternal triangle seems to have been disposed of. No BEM, Babe and Hero this issue. Just BEM and Babe. Huzza! Huzza! But since when has Earth a yellow sky?

Enough of sorrow. Let us be happy. This is the time when my thoughts turn fondly to rating the stories. I know it's an awful ordeal for you, Sarge, but it must be done. Duty calls!

BATTLE OF THE BRAINS—Good grief! Another robot story. But I loved it. Splendid writing. Wonderful plot. Reminded me of Adam Link.

INDESTRUCTIBLE MAN—Hamilton is sinking. This is not like the old days.

UNDERMOST—I liked it, but though it would be simple to put a friction solvent on the car alone, how would they do it on a thousand miles of tunnel?

ROCKET PANTS—Fair.

FIND THE SCULPTOR—A very good time-machine story. It reminds me of the time I . . . No, I'd better not tell it. Ye Sarge might take it to heart when I told him I found a Xeno-guzzling creature in the long-ago past. Could it be one of your ancestors, Sarge?

JONES' PHYSIQUE—Very well written. The true life of myself.

ROCKET SKIN—Alas! Ray Bradbury has sunk into the depths of solitude. I refuse to comment on the story, as I do not use that kind of language.

LIKE DUPES—Perfect! Speaking of Murray Leinster, when is he going to give us another story like **THE ETERNAL NOW**?

THE READER SPEAKS—Ron Anger, I salute you! Yes indeed! That beautiful (?) drawing is a perfect picture of Ye Sarge.

Well! Well! See my letter is first this month. A fine choice, Sarge. You know talent when you see it. (Yas, I'll give you the jug of Xeno I promised. Here. GURGLE! GURGLE!)

Leon Birbaum! You evil creature, how dare you call TWS tripe? You dare to compare Kuttner's **HOLLYWOOD ON THE MOON** and **DOOM WORLD** to **Lovercraft**? Why the plot of **IN THE VAULT** could be used to a thousand times better advantage by one of our modern writers. Give it to a newcomer like Leroy Yerxa or Gardener F. Fox and you would have a **STORY** instead of a sketch full of flowery adjectives.

You had best retract your statement. Robert Bloch is not half as good as H. P. Lovecraft, but twice as good. We fans do not like to have our favorite writers pulled through the mire. Not that Robert Bloch is my favorite writer—he is not. I just gave him as an example.

By the way, what's wrong with three-issue-old readers? At one time you had only read three issues, hadn't you? If it were not for new readers and authors Science-fiction would become stale.

And now, Sarge, let me tell you of my little time journey.

Ah yes. I can remember it as if it were but yesterday. (It was.)

I worked on my invention for many moons. Summer came and went south for the winter. At last I finished. Bidding goodbye to my fellow dogs (of the hound variety) I seated myself and took the controls in my strong (!) bronzed hands.

I was blinded for a second, and then sight returned. I was standing on the warm earth of yesterday.

A caveman approached me, peering beneath beetled brows. Then I knew I would be the first civilized man to hear an ancient caveman of the stone age. He opened his huge mouth and grunted:

"What's cookin', Jackson?"

"I replied. "I'm your great-great-great-great-grandson. I come from the FAIR Cities of tomorrow."

"By the way you pronounce the word 'FAIR' I presume your name is LaGuardia. Be it right?"

I saw red. I shouldn't have done what I did next, but I couldn't help myself. I put on my black hat, grabbed the funny papers, and said:

"And now, 'kiddies, Breathless Mahony hits the gardener with a hammer."—46 E. 24th St., Bayonne, N.J.

This, on the whole, is another example of the kind of letter not to write the Sarge in the future. But the sentiment is sweet by and large and we are well aware of the fact that transitions should not be made too abruptly. Watch your tendency to compare authors. Such comparisons are definitely malodorous if carried to extremes.

A NEOPHYTE DOTH WRITE

by Joe Hayhurst

Dear Sarge: Well! That spring ish was really somethin'. Every time I read your mag I decide to write in and express my opinions. But, I never get around to it. This time I simply must express my gratitude for "Battle of the Brains." There was a scientification tale that really hit the spot. The idea of human brains deposited in metal bodies intrigues me. As for the rest of the stories, "Rocket Skin" and "Find the Sculptor," were, in my opinion, the best of the lot, with "Like Dups," and "Indestructible Man," following. "Undermost" was hackish, and "Jones' Physique" just doesn't rate.

The cover, I like pin-ups too, Sarge, but not on my st covers. I would like to see what goes on in Mr. Berger's mind as he laughingly paints BEM's despite the protests of hundreds of fen, and gleefully draws beautiful babes with a few scraps of very form-fitting clothing hanging on with the aid of a torn strap. Really, Sarge, it's getting to where I'm ashamed to walk down the street with a copy of TWS unless it is folded under my arm.

The pictures for "Battle of the Brains" were both very good.

By the way, you said you wanted more answers to the Cosby poll. Here's mine:

1. One novel per issue is plenty.
2. Four or five pictures to a novel is possible.
3. Enough for an effective story.
4. One or two.
5. Four
6. None. Save the space for S-F.
7. a. Story behind the story.
b. The reader speaks.
8. It would be nice.
9. YES! Very much.
10. Depends on the quality of the stories.
11. Four bits or a dollar.
12. No; ugly!
13. Never would be too soon.
14. As often as possible.
15. Series stories have a way of getting in a rut. Like Lefty Feep.
16. Serials are swell, if good enough to hold your interest from month to month.
17. I like all the artists some of the time, and some of them all of the time. Especially Finlay.
18. None.

Well, that's about all for now, Sarge, and keep up the good (?) work.—Belton, Texas..

Thanks for the Cosby rating, Mr. Hayhurst.

But as for the fan beebes about the covers, they do sell magazines regardless of fen opinion. So your purists will continue to get them come what may. Why not fold your inhibitions under your arms instead of TWS? And if you want long novels, read STARTLING STORIES. That's where we print them, one per issue.

WEINBAUM OR ATOM BOMB?

by Gerry de la Ree

Dear Sarge: Here I go again. It seems to me I've made this same plea a number of times and I guess I'll just keep on until someone does something about it.

One of the best science fiction authors ever introduced by Wonder Stories was Stanley G. Weinbaum. I'm sure that most fans will agree with this statement. Why, in Heaven's name, can't you set aside one issue of either TWS or STARTLING for a Weinbaum Memorial number?

Your two magazines published a total of eleven Weinbaum yarns, among them three of his best—"The Black Flame," "Dawn of Flame" and "A Martian Odyssey." I realize that just about every Weinbaum short you have the copyright on has been reprinted at one time or another in SS, but I'm certain that your readers would all like to see these stories combined into one issue of the magazine.

From a money angle you would gain on the issue, for the stories are already yours. About your only expenses on this issue would be for art work, which you must have for each number anyway. Perhaps your publisher is against a reprint policy—this I wouldn't know.

It's only a suggestion, but to get "The Black Flame," "Dawn of Flame" and six or seven Weinbaum shorts in one issue would be worth considerably more than 15c to me—and to others, also, I assume.—s Bogert Place, Westwood, New Jersey.

As one of the most active of eastern fan magazine publishers and one of the more thoughtful students of STF, Mr. de la Ree deserves an answer to his plea. First, we agree heartily with him on the merits of the work of the late Stanley G. Weinbaum. He deserves all the reprinting the paper supply will stand.

Furthermore, all eleven of the stories printed in the old WONDER MAGAZINE have been republished as Hall of Fame Classics in STARTLING STORIES. Which is pretty good proof of the above pudding.

But our magazines are primarily and entirely (with the exception of the H-of-F Classics in SS) devoted to the publication of new science fiction and fantasy. To stop dead in our tracks to reprint an all-Weinbaum issue would hardly be encouraging to our authors in these days of bi-monthly publication.

So if Mr. de la Ree's request is ever fulfilled, it will have to be in the nature of some special supplementary publication—and in these days of still-limited paper supply, such a publication is out of the question. Sorry.

TANNING THE SARGE'S HIDE

by Alvin R. Brown

Dear Sarge: Now we have it, now we don't. By that I mean quality in dear old TWS. To illustrate, take the present issue, Spring, 1946.

Starting from the cover, a series of groans issues

from my ruby red lips. Is that art? Maybe I'm crazy, but I don't think so. Can't you find someone better than Bergey?

Your stories collectively aren't worth a plugged nickel. The best in the issue is LIKE DUPS by Leinster, but only because it had no competition. The issue as a whole doesn't even count as far as I'm concerned.

The illustrations aren't even worth talking about. Suffice to say that the cuts for the ads were better than the story pics.

One letter in the reader speaks interested me. So an open letter to Mr. Birnbaum.

"Dear Mr. B., One thing you forgot, HPL was not a science fiction writer. I've been reading S-F for 8 or 9 years but I still consider HPL a fine writer of horror and fantasy BUT DEFINITELY NOT OF SCIENCE FICTION. If Mr. B. will read 'The Best of Science Fiction' edited by Graff Conklin, he'll find out what I mean."

"And you really left yourself wide open in your last paragraph. Have you ever read anything by Weinbaum or CA Smith or EE Smith, etc? I also have read quite a bit of Lovecraft, but you stick to horror and fantasy and I'll take my S-F straight with no AZATHOTH, CTHULHU or YOG-SOTHOTH to annoy me."—139-29 44th Road, Flushing, New York.

They are annoying, aren't they, Reader Brown? As for that, so are your other expressed opinions.

XENO IS BACK

by Tom Jewett

Dear Ghoul (pardon me, I saw your picture): Just read the Spring issue of TWS. It contains the best collection of stories you've published in a couple years.

In first place with 8 Xeno highballs is "Battle of the Brains." This was darn good. Especially the beginning with the description of the awakening of the brain of James Mason. I wondered how you were going to introduce a female interest. Speaking of females (and who isn't), the pic on page 13 was very good.

Next with 5 Scotch-and-sodas is "Indestructible Man." A darn good story by Cap Future's papa. A unique plot. A novel part was where Carl played mumble-de-peg on Ryan's chest. I bet that tickled.

Third with 4 whiskey-sours is "Rocket Skin." It pases a new thought on the aspects of space-travel. I never thought about it that way.

"Lend me your horse-shoe that magnet, Junior. Daddy's got to make a quick business trip to Mars." or—"Don't lick Daddy apart from the skin, Junior. He's carrying our overnight bags!"

Fourth with 2 Tom Collinses is "Rocket Pants." Also good. "Don't glue Daddy's pants to the sky rocket, Junior. He gets 'high' often enough as it is!"

Fifth with a mint julep is "Undermost" or "Hell-bound Subway." I've been told to go to hell before, but it's too much when I got to pay my own carfare. Anyway, it's a good story.

Next comes the other three with a jump into Vat 69. These were good, but not as good as the others.

The cover painting by "Brulser" Bergey was good. EXCEPT (see how I sneaked that in)—the brain wouldn't need all those port-holes to see with, would he? He sure is using those claws to good advantage!

Noticed Mr. Anger's portrait of you, Sargey. Haw. I didn't think anybody else had dreams like mine.

Inside pics: Best are on pages 13 and 15. I kinda like those symbolic pictures like that on page 15. I do wish you'd get somebody else in Marchioni's place.

Your letter didn't wasn't up to par this ish. How about starting a real high-power discussion in your columns. Maybe like how many molecules per cubic centimeter in space. Or something harder. Anyway, something anybody above a moron can sink his teeth in. After all, not all of us have graduated. I didn't have any physics in school, so I'm practically ignorant.

Look, Sargey. I think you're making an issue out of not letting Thomas or O'Donnell sign their names to their artwork. You could put a line at the bottom of the page telling the artist. Don't worry about us not having anything to gripe about. We'll find something if we gotta haul out our "Little Peachy" electron microscopes.

Tell Ray Corley to make a noise like an air raid siren and blow.

Mr. G. U. Irmitt—what are you spelled backwards?

Tom Wade—what you got against pinups?

About your portrait, Sarge. You look like one of my ghoul-friends. So long for now.—670 George Street, Clyde Ohio.

All we can say, outside of remarking that Mr. Jewett certainly seems to be more easily satisfied than the majority of letter writers-inners, is that he certainly seems to have reverted to tripe—the old tripe—the tripe the Sarge is desperately trying to escape. Perhaps we can wish our three gremlins on him.

WHERE'S KENNEDY?

by Gene Hunter

Dear Sarge: Are we still double-spacing these things? I've forgotten. Oh well, little matter. Firstly, what's happened to all the old guards of letterhax in THE READER GIBBER? Anger's the only guy I vaguely remember. Kennedy must be dead or something. He must be. I haven't heard from him nor received VAMPIRE in ages.

Even my one-time correspondent Chad Oliver is among the missing this time. And who's seen that old contributor, Jay Chidsey? Haven't seen an epistle by him in eons. Given up fantasy, Jayhawk? Then there's Krueger—and Hamel—and Bace—all unaccounted for in some time.

Hmmmm. Perhaps this letter will stir some of the boys out of hiding. Going back even further in the haze that envelopes the old issues of TWS, remember the days of that slap-happy sergeant (no, not you), Jerry Mace? And that little twerp who used to disagree with everything I said, Ronnie Maddox?

Not to mention Ebey, Carter (he's overseas—poor guy), Waible, "O-but-G" Kinkade, and others? I could go even further back to the days of Hildy and D. B. Thompson, but I won't. Perhaps I'm in a nightmare. But tonight, but seriously, I'd like to see some of that old bunch turn up again in these pages.

Must Hunter carry on alone? Then so be it.

THRILLING WONDER STORIES, Spring 1946. Not a bad issue at all, Sarge. Not as good as Summer (2.9) or the last ish (3.1), but still pretty good.

First, the cover. That walking-leaping-surface-craft-submarine-fly-by-night gizmo in the background is equal to the best ever done by Rogers. I didn't dislike the unfortunate shemale in the foreground, either, Brother Bergey. You've proved again that you can do excellent work, given the right scene to work with. Mr. B. takes home a 3.0 classification.

Thomas (?) takes first place in the interior department with 3.0, while Marchieni and Morey, both better than usual, grab off 2.5.

Stories:

1. BATTLE OF THE BRAINS—Jerry Shelton—3.8. Very good, Shel. Just about the best you've done. Some of your yarns I haven't cared for in the past (DEVILS FROM DAKONIA, to mention one) but this redeems everything nicely.

2. ROCKET SKIN—Ray Bradbury—3.0. Very neat. Brad has evolved more new ideas than any other sci-fi fantasy writer in the past couple of years. Now if he'd just work on some longer stuff.

3. UNDERMOST—Manly Wade Wellman—3.0. Manly hasn't turned out anything really outstanding in a long time, I'm afraid, but he keeps on a pretty even keel. Hasn't done any really poor work lately, either. How about some more metal-pussed Martians one of these days?

4. LIKE DUPS—Murray Leinster—3.0. How do you pronounce that, anyway? Dups—dups—or what? Never mind. Nicely done, Mr. Jen—er, Mr. Leinster. Another one of my long-time favorites.

5. ROCKET PANTS—Noel Loomis—2.5. Here we begin to drop down to the average level on our little poll. Nice space adventure, but after all.

6. INDESTRUCTIBLE MAN—Edmond Hamilton—2.5. Shades of Superman! Not as good as the same author's novel last time, but still passable.

7. FIND THE SCULPTOR—Samuel Mines—2.5. Old idea, old treatment, still good.

8. JONES' PHYSIQUE—Wilm Carver—2.5. I'm holding my breath waiting for all those self-styled scientists to start prattling about this size reduction-

mass business again. It's inevitable, of course.

That's all Sarge. You put together a nice issue this time, taking a 2.8 average. You've done a lot worse in the past. Don't let this bi-monthly business lower your standards any.—2503 Burton Avenue, San Gabriel, California.

We shall try not to, Reader Hunter. As a matter of fact, materials on hand and due to come in shortly should lift the level higher still. Most of the boys who can really conceive and write fine STF are back on the job. So—stay with it. It should prove worth while.

As to the absence of the hacks supreme, Kennedy, Oliver, et al, it seems highly probable that they have passed through or are emerging from the phase of writing the Sarge. Their epistles show up much more rarely these days.

However, a check of back issues should serve to reveal to you that writer-inners come and go in groups, and that a letter department such as THE READER SPEAKS rises and falls with them. Fortunately, a new gang always seems to step in and pick up the slack.

Still, if the above mentioned Kennedy and Oliver are missing, you put regulars as Gene Hunter, Tom Pace and Rick Sneary are on hand to stand up for the old guard. At least we are getting plenty of mail. And here is one who preceded all of those you mention, back for another crack at the Sarge after a long hitch in the Marines.

FROM THE SHORES OF WEST GASTONIA

by Wilkie Connor

Dear Sarge: About two years ago, Uncle Sam needed a few Marines for his Third Marine Division, so he yanked this humble person away from STF and plunged him into places where TWS and STF were unknown! I've been released a month, and I've strayed back into the fold of TWS fans with the Spring issue.

From the bottom of my heart, I can say I think TWS is an excellent magazine. The stories aren't as deep and "high-toned" as some of the others, but I find they have a "human" quality and a certain amount of "story" that makes up for their often trite plots. And, as the Bard said, "The 'Story' is the thing!"

There is bound to be a certain amount of triteness in every basic story plot, regardless of what fiction field used. There are just thirty-six (I think, without looking it up) "dramatic situations." I must hand it to your authors for their ingenuity in their handling of these situations and very, very often manage to pull a brand new chestnut from an old fire!

When I first became acquainted with STF in the ancient days of Ray Cummings' "Girl of The Golden Atom" people often sneered at the perverted minds who could dream of such impossibilities. I couldn't restrain my laughter, when, out on the Guamanian boom-docks on maneuvers, we first got word of the atomic weapons being used on Japan. I wonder if the atom bomb is a product of a "perverted" mind?

Now that radar has conquered space, how long will it be, I wonder, until man himself traverses the unknown? Or should we still call it the unknown? For via radar pictures, the "unknown" should soon become the "known"—even before man personally visits the outer voids, he will find it possible to know, far better than any telescope could tell, just exactly what the scoop is—just exactly what he's running into! Right?

[Turn page]



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"Battle of the Brains" was a good yarn, but it seemed to be a condensed novel. It should have been drawn out, mellowed and ripened into a full-bodied tale. Then, it would have merited a place amongst the great yarns of all time, instead of being merely just another good story.

Your best artists never sign their names. Are they ashamed?

Now that the paper shortage has been relieved, how's about that annual we were discussing along about the time Japan became ambitious?—Box 2392, West Gastonia, North Carolina.

Welcome back, Mr. Conner. It was our humble belief that the Bard said, "The Play's the thing," but we suppose the "story" is interchangeable with the same. As to the thirty-six possible dramatic situations, only about one-third of them are publishable by modern-standards of moral taste. The others, stemming from the Greeks, have acquired a lot of unprintable names for themselves that would astonish even the average woman's club reader group.

The world is still out debating the decision as to the mind of the inventor of the atom bomb—inventors, rather. And our artists sign their names when they feel like it and the art editor doesn't cut off too much of the bottoms of their pictures. Annuals are still beyond our present plans, thanks to the paper set-up. But the near future should reopen the discussion.

ANOTHER VET SOUNDS OFF

by Garvin Berry

Dear Sarge: Have just robbed the Army of its brightest luminary with intentions of switching said b.l. back to sf fandom. First duty of course was to try out all pro mags to decide which to resume reading. Yours was one of the few to pass the test, although not, I'm afraid, with flying colors. Opinions herewith attached.

Spr. '46 issue. Cover: Bergey can plan & paint at least an adequate cover, so why this sort of thing?

Stories: In general, too much cops-'n'-robber atmosphere with a faint haze of melodrama fogging the air. Essay about 55% hack too. Several good authors here, but not up to par, esp. Leinster & Bradbury.

1. BATTLE OF BRAINS—Fairly good. Should have been longer for more complete development of human-machine relations, Klarth's aims, etc. Could stand a sequel; in fact, a series here would make the old Zorome yarns look like comic strip drama.

2. ROCKET SKIN—2nd because I like Bradbury even in his more hackish moments. The space hitch-hiker idea was new to me.

3. LIKE DUPS—Like Leinster even in his ditto moments too. Aged plot, but nice work on the Martians esp. the fascinating plants-for-everything idea. Pains me, though, the way some of the more imaginative boys dream up a beautiful set-up like this to be discarded after one second-rate yarn.

4. UNDERMOST—Like most Wellmans, carefully planned, coherent & readable. I like MMW; never know when he'll pop up with a TWICE IN TIME.

Rest of issue is pure trivia. Hamilton is intrinsically better than MMW, but rapid writing carelessness & formula usually ruin him as simply shown in this feeble imitation of Weinbaum's ADAPTIVE ULTIMATE called ROCKET PANTS which has a dated plot, sloppy writing, insipid characterization. The other two shorts are throwbacks to the oldest time-travel plots & Ray Cumming's Tubby has my myriad versions of Golden Atom shrinkage.

I wish it were THE READER SPEAKS instead of SGT. SATURN SPEAKS. I hated the SS inanity when it first infiltrated in '40-'41; it's even worse now that it has reached its putrescent peak. G. U. Irmidt—apt cognomen, there—of Phoenix (May Klone smile benevolently upon him) has aptly expressed my feelings

same for the regurgitation which seizes me each time I see the infantile trash. This wasted space could be much better utilized for a revival of the Science Fiction League.—1107 Fugate Street, Houston, Texas.

Well, perhaps you prefer the Sarge in current guise—we hope. Otherwise, we are crushed, never to rise again—but take no money on that one.

STREIFF KILLS STREIFF

by Telis Streiff

Dear Sarge: I have decided to honor you with my comments (whoops) on the Spring Thrilling Wonder Stories. First-off the cover . . . altho the colors are gaudy the artistic point of view is fine. But on the cover there are teeth in the talons, but on the inside (page 13) there are no teeth . . . why?

Four novelets and four shorts, but (I use that word a lot, don't I) there is no novel . . . again I ask why? BATTLE OF THE BRAINS by Jerry Shelton . . . if this had been made into a novel it would have been a true classic. As it is, it's a wonderful novelet.

INDESTRUCTIBLE MAN by Edmond Hamilton . . . this is a very poor excuse for sf . . . we get enuf of Superman in the funnies.

UNDERMOST by Manly Wade Wellman. Well I guess it was QX.

ROCKET PANTS by Noel Loomis . . . BBumrrpp.

FIND THE SCULPTOR . . . by Samuel Mines . . .

"THEY SCULP" was better, get the connection?

QX . . . I'll bite, who did make the statue?

JONES' PHYSIQUE by Wilm Carver . . . reminds me of the Tubby stories. However in places it was funny (?).

ROCKET SKIN by Ray Bradbury . . . fine . . . but would a person who knew that only one out of every three would live try that journey? Not I. I rather value my life.

LIKE DUPS by Murray Leinster . . . heh heh heh well I guess Breen got what he was after. I still value my life.

THE READER SQUEEKS (oops parden) More crazy letters more droopy replies more morons more idiots. Himmum don't you say it all Sarge, drink

MARTIAN VARNISH (a drink) and jump out a space lock . . . without your space suit.—548 North Delrose, Wichita 6, Kansas.

And your letter is by far the droopiest included in this issue, Reader Streiff. Straighten up, et cetera! We have already explained that, if you want a novel, you'll find it in STARTLING STORIES. TWS is not conceived for stories of that length. Which should answer the query for all time. Next. . .

SNEARY'S HEARY

by Rick Sneary

Dear Sarge: Well after a long wait you finally did send good old TWS into this part of the country. I thought you were mad or something.

As always I have a word about the cover. It's not bad this time, for a change. At least he has a rocket on the cover. Of course, Bergey made the usual mistakes. The Super was a brain, and thus why the portholes?

Most of the stories were good, but two were outstanding. They were Battle of the Brains and Rocket Skis. Both more because of the new ideas they brought forward than newness of plot.

Battle of the Brains was not really a new idea, but it was handled well. The idea of one man being a whole spaceship has vast possibilities. But it seemed to me I came in late. Or anyway it seemed to be the second part of a story. (Tho, of course, it wasn't.) Those fen that don't like love with their stories must have been happy with this one. It was cut down to .00005. Do it a little more often, why don't you.

The other story I liked was the shorty, Rocket Skin.

This Ray Bradbury is good. Almost another Kufner. Now I for one don't think it would be possible to hold onto the side of a space ship with a 10-ton magnetic, but it was a darn good story.

The drama and horror of it were brought out very well. The longing of the man Ellis to see and feel the sun was, even tho he was supposed to be the villain, pathetic. It makes one stop and think, we who have everything, what it would be like to do without some of the commonest of them.

The sun rising in the morning is common enough thing to us, but what would we do if it didn't? For just one day? We on the West Coast know what it is to sit in the sun and feel its warmth and relax in it. The thought of a world without a Sun is—well it is beyond my power to imagine.

The humorist. Pop, and the wise philosopher were interesting in their ways too. Again I say it was one of your best short stories. I am always glad when you have something like this. Interlink was one and so was the outstanding You'll see a Pink House. Too bad there can't be more like them, but you can't help it I suppose.

The rest of the stories were only average, except for Jones' Physique. Foooy, Hack, bung, tripe! How could Carver do such a thing? Why it was like that old master hack ray cummings. (No capitals) And after the swell Pink House!

Inside pics were as bad as ever. I suggest you get Ron Anger to do your work. Then at least the artist would be a fan and could fight back.

Well, well, the Reader Speaks is surprisingly lacking in old friends. Not one I knew. (If you print this I'll at least know one of the dopes—er, I mean readers.) After reading Irnditt (the wag!)'s letter I decided one thing. You can't refuse to print my letter because of the spelling. I agree with you about the phone numbers.

A rose (just one, not four) to you, old dear, for your comeback at Birnbaum. I will admit I have read only one Lovcraft story, but I didn't like it. I wouldn't say he was nuts for liking Lovey, but I don't think he should say Glisson is nuts either. Glisson may be new, but he knows what he likes.

[Turn page]

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I myself would rather read a good TWS story than a Lovey. (If they are like the one I read) I don't like weird stories, and I don't like his plots. But I don't expect to have many agree with me. One thing, there wouldn't be much to read if we all only liked one writer. I like Kuttner, but I would get tired of Kuttner and nothing else.—2962 Santa Ana St., South Gate, Calif.

Methinks there lurks a sentimentalist beneath the Sneary space armor. All that drivel about appreciating the wonders we have? Who ever did appreciate what he had? Surely not Reader Sneary. He doesn't even appreciate TWS.

And who says only West Coasters get sunburns? Ye Sarge hopes you blister your lily white hide!

SWAN SONG

by Jim Kennedy

Dear Sarge: Today I sauntered into a bookstore to look over the stock when suddenly a bright cover off in one corner caught my eye. But I made the mistake of calling out the name of the book as I dove for it and I wound up in a scramble with a half dozen other customers. I emerged from the pile victorious.

Dropping fifteen cents on the counter as I went out I rushed home. But I had to run for my life. For I hadn't gone more than two blocks when there were about twenty people after me. But I made it home safely and bolted the door. Ignoring the clamoring crowd outside, I set back to read the book.

Just then I thought I had gotten the wrong book. No! there was the name, **THRILLING WONDER STORIES**. But where was the Bem? Where was the Hero to fight the Bem? All there was was a broken down machine trying to get fresh with a girl.

Then I saw **Bergey's** name on the cover. There was only one conclusion. **Bergey** must have been blindfolded at the time because it was one of his best covers. But break the news to him gently or he's liable to have a relapse.

Looking inside I almost fainted. Not the usual three or four stories to a book. Not five, not six, but eight stories. How did this get by the censor?

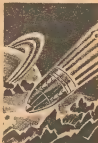
THE BATTLE OF THE BRAINS was a little complicated in spots, but none the less a good story. Too

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bad your artist doesn't think so. The illustrations were awful. But it rates about nine gallons of Xeno. Stop drooling, Sarge! They're for the author, not you.

INDESTRUCTIBLE MAN was excellent. But that is not news. I've learned that if it is written by Edmond Hamilton there is no doubt that it is good. Twelve gallons of Xeno for this.

UNDERMOST wasn't very good. Only two gallons of Xeno for this. It's about time I started getting technical, so! In *Undermost* on page 56, on the first line of the tenth paragraph, either the author or you made a mistake. Who is Westwood? Do you mean Westcott? Sarge, quit pulling your hair and screaming like that.

FIND THE SCULPTOR was fair although it could be better. Five gallons for this.

ROCKET PANTS was pretty good. For once we have the hero coming through on just skill alone without any of these fancy instruments coming along and getting him out of a jam in time. Also, of all the illustrations, the one on page 67 was the best. Give this eight gallons.

JONES' PHYSIQUE and ROCKET SKIN each were worth five gallons.

LIKE DUPS was lousy. Only 1/2 gallon for this one. Even the illustration was bad.

After I finished the book I quietly fainted. This couldn't be possible. A Thrilling Wonder that was worth talking about. There were a few poor stories. But there were a lot of good ones. All I got to say is, keep up the good work.

By the way, Sarge! Is this the sixth time I've written to you or the seventh. I've lost track. What's the use, you never publish any of my letters. But just in case this gets published, I'll send out my usual S.O.S. signal.

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By the way, Sarge! I thought in the March issue of *Startling Stories* that you said that both *Startling Stories* and *Thrilling Wonder Stories* were coming out bi-monthly. That's why I was expecting the March issue of T.W.S. instead of the Spring Issue.

And another thing, Sarge . . . Well, watcha know! The Sarge has fainted!—Summit City, California.

SS and TWS are bi-monthly. The lapse in labeling them was due to a shift in the publication date which has thus been deftly jumped in true space-warp style. Better lay off the Xeno, bub. It can become a habit, you know. And a demerit for catching the Westcott-Westwood error on page 56. Westwood is the home of Author Manly Wade Wellman and Fanhack Gerry de la Ree. So don't take us to task too bitterly for getting confused.

So, the new Sarge is now officially born. Give us a line on how you like and/or dislike him. He's still ready with plenty of harpoons for his critics. See you next time we hit the stands, and keep those letters coming. Please address all communications to Sergeant Saturn, c/o **THRILLING WONDER STORIES**, 10 East 40th Street, New York 16, N. Y. Thank you!

—SERGEANT SATURN.

Next Issue's HEADLINERS!

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THE STORY BEHIND THE STORY

MESSRS. John Russell Fearn, Murray Leinster and Keith Hammond have been obliging enough to delve into the origins of **THE MULTILLIONTH CHANCE**, **POCKET UNIVERSES** and **CALL HIM**



DEMON respectively and come forward with notes thereon to Sergeant Saturn.

Since the first two of these stories are on the pseudo-scientific side—although Mr. Fearn's contains definite fantasy connotations—while Mr. Hammond's is horror fantasy pure and far from simple, they present an unusually interesting variety of ideas.

But let's let the authors themselves do the explaining. First, Mr. Fearn:

It was the thought of how many things do happen by chance that led me to piece together the details of this novelet. Remember how Huxley said that an army of monkeys strumming on typewriters would be bound one day, by chance, to write a Shakespear sonnet? Remember how Eddington has said—and others too—that the water in a kettle on the fire might by some improbable chance freeze instead of boil?

Well, these two hypotheses started me off. I had to have something more interesting than a kettle of water, so I hurried along to the day when atom-smashing and metal-transmutation will be a mere routine affair. Out of this I produced, with I hope something of the unexpectedness of the good magician, a most delectable blonde.

I fancied this ought to make for interest, and I realized too that I had a fine chance for a humorous development—for a blonde in a coldly scientific physical laboratory is by no means usual.

But I had to stick to my original plot outline, so the humor was put on one side for the development of the age-old theory on how life came to Earth, why Mars has become more arid than a dehydrated egg, why Venus has no moon, and so on.

Naturally it is purely a speculation—and show me the science-fiction yarn which is not—but it was a decided joy to write and to figure out,

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albeit with a headache or two, how much chance can rule our lives and to a great extent predestine our future.

The wiseacres say—"Leave nothing to chance!" If only they knew it, chance is the single thing that is certain!

Good hunting, fellow scribes and readers! Perhaps by some multilithion chance somebody will like the yarn.

Modest chap, this Fearn. Rest assured, a number of people have already expressed liking for the story—hence its appearance in print.

Taking fewer chances on chance and with more regard to the scientific scene, Mr. Leinster approached his novelet from a very different jumping-off place. Says he:

"Pocket Universes" came out of an argument I had with myself. Under certain circumstances, space is warped. Some of it apparently ceases to be. If you make a gigantic square, exactly accurate, with the sun in the middle, a line through the sun to the two parallel lines at right angles to it will be shorter than a line at the same angle between those two parallel lines a few million miles out. It works out that things which are equal to the same thing aren't always equal to each other.

For no particular reason that bothered me, and I started to play with the idea of space-warps on a small scale and the effects they'd produce. The science part of "Pocket Universes" came out of that.

For the story itself, any number of inventions have been made and lost. In Nero's time an artisan showed the emperor a crystal goblet which he dashed to the ground, dented, hammered into shape again with a hammer, and presented to the emperor.

Nero had him killed to preserve the value of his collection of crystal. Now, we have transparent plastics now, but one wonders. . . . And in John Evelyn's diary, he tells that in 1660, in Rome, he was shown a ring, from the stone of which a man lighted his pipe as often as he pleased. The man offered the secret for ten ducats, Evelyn thought it too high, later reconsidered and couldn't find the man again.

Evelyn wasn't a liar. They had neither matches nor their equivalents at that time, and it wasn't a flint device. We've got pocket-lighters now—but none as small as the stone in a ring—yet one wonders. . . . And how many other discoveries have been made and simply forgotten? You guess. I guess a lot.

There you have the elements of the yarn.

Apparently Mr. Hammond had not yet heard that the Sarge has gone on the wagon—hence the highly irreverent tone of his mis-sive which follows. Furthermore, your correspondent has read **HELEN'S BABIES**, which he has among the books in his library, along with **THE CASTING AWAY OF MRS. LECKS** and **MRS. ALESHINE**.

On the whole, Mr. Hammond's attempt to explain the origins of his magnificent fantasy is about as finite as any explanation of such

a story can be—in other words, it doesn't explain a thing. But it has its moments for all that, as follows:

One evening I was showing Sergeant Saturn the right way to mix a Xeno cocktail—with papaya juice and limes, not kerosene and lemons—and we got to talking about science-fiction. He didn't want to. He kept muttering curses at people who write him letters without knowing the difference between a helical Henderson gravity drive fuse and a beam-powered klystron—but, anyway, I told him he couldn't have any more Xeno unless he shut up and let me talk.

"Well," he said, reaching for the Xeno, "I'll tell you one thing, Hamilton—"

"Look," I said, "I'm not Ed Hamilton. Do I look like Ed? I'm Hammond, remember."

But he only shuddered and gulped Xeno.

"I don't care who you are," he growled, joggling his anti-gravity belt and floating up to the ceiling. "Why are you only two feet high?"

I looked up at him.

"That's perspective," I said. "Turn off that belt of yours and come down. I wish you wouldn't wear full space armor when you're on Earth."

"You're two feet high," he said. "Just about the size of a small child. Hey, why don't somebody write a story about a small child?"

"Like *Helen's Babies*?" I said. But he hadn't read it.

"No, a science-fiction yarn," the Sergeant said, struck by an inspiration. "This kid's a space pirate—see? And he's in love with the beautiful daughter of the governor of Mars."

"Hand me down the Xeno," I said. "And just how old is this child hero supposed to be?"

"Oh, ten or twelve . . . hm-m. I see your point, Hammond. It wouldn't be moral to have a kid that age make a living at piracy, would it?"

"A lot you know about morals, you hi-jacking space-rat," I said, and he lapsed into invective, calling me a knob-headed Neptunian species of virulent dandruff, probably because he'd accidentally dropped the Xeno.

"Why do you come up with these terrible ideas?" he demanded. "You ought to know by now that you can't write a science-fiction story about a small child."

"It was *your* idea."

"It wasn't, you draggled-toothed, buck-headed offspring of a Saturnian."

"Shaddup," I said, which is Martian for Merry Christmas. He glowered.

"You put a small child up against a Mercutian fire-hydra and who do you think would win?"

"You got something there," I said. "Did you ever consider that the immature colloid mechanism of *homo sapiens*' brain is totally alien to the adult?"

He wished me Merry Christmas in Martian and, when I wasn't looking, chained me to my typewriter. After that, he went off with the Xeno, singing "Blow the Man Down," and left me to write the story.

I wasn't going to mention this, but the Sergeant has been busted down so often he puts his stripes on with safety pins. I don't care if he is a galactic non-com, he can't talk that way to me and get away with it. As you were.

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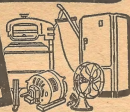
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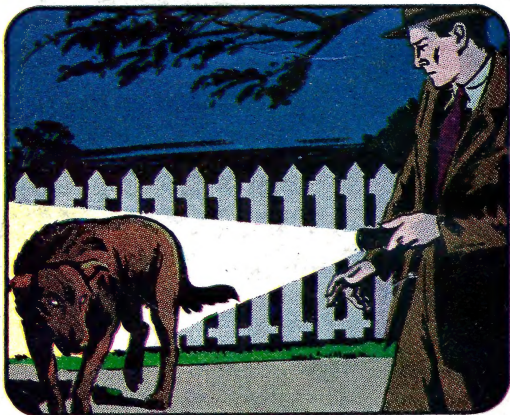
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